



Carrel-Electrade Ltd is a New Zealand owned and operated Manufacturer and Distributor of a wide range of Industrial electrical control and monitoring componentry. Not just another foreign owned branch office, we're here to offer local solutions to local problems.

With a long history of experience meeting the demands of New Zealand Industry, the company supports long-standing values such as service, dependability and reliability coupled with engineering expertise, ingenuity and innovation. We believe our advantage is our originality and customised manufacturing flexibility.

We are New Zealand's only manufacturer of analogue panel instruments, timber moisture meters and electrical transducers. Dedicated staff in our switchboard meter scaling department offer the highest level of professional standards and have decades of practical experience now combined with a new ability to print customised scales in volume. This means that we not only understand your requirements but have the skills to provide the solutions you need.

Our T Series and LP Series electrical transducers not only have a long history of reliable service to New Zealand industry but are sought after in overseas markets for their accuracy and dependability. All products we manufacture, have been designed to meet the requirements of international standards and meticulous attention is paid to quality and robustness. Modernisation via component and circuitry upgrades are ongoing.

Our EWS range of locally manufactured audible alarms have been successfully utilised in a tsunami warning alarm system in Northland and many other applications. The R-ELT emergency exit light test timers have been a resounding success as have the R-ISW range of current sensing relays with built-in timers. They have proved to be very popular in new apartment and rest homes facilities, and we have now developed a flush-box mountable version, model R-ISWF.

We offer an extensive and complementary range of internationally recognised brands in imported industrial components that are well accepted throughout New Zealand industry.

In addition to standard products we work closely with end users to develop specialised measuring equipment to meet specific needs. These projects may involve the adaptation of standard products, or completely new designs. When coupled with the experience and expertise of our technical and sales staff and our national distribution network with warehouses in Auckland and Christchurch, Carrel-Electrade Ltd truly offer



**Carrel Electrade Limited.**

**Proudly 100% New Zealand owned and operated.**

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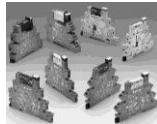
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## 38 Series - INTERFACE RELAYS

6mm DIN Rail mount with integral LED & replaceable relay

38.01-024-AC	RELAY INTERFACE MODULE, 1CO 16A@250VAC, 24VAC/DC	\$	63.00
38.01-024-DC	RELAY INTERFACE MODULE, 1CO 16A@250VAC, 24VDC	\$	53.00
38.01-240-AC	RELAY INTERFACE MODULE, 1CO 16A@250VAC, 240VAC	\$	67.50
38.31-024-9024	SSR INTERFACE MODULE, OUTPUT 5A @24VDC, 24VDC CONTROL	\$	96.70
38.51-006-DC	RELAY INTERFACE MODULE, 1CO 6A@250VAC, 6VDC (38.51.7.006.0050)	\$	43.10
38.51-012-DC	RELAY INTERFACE MODULE, 1CO 6A@250VAC, 12VDC (38.51.7.012.0050)	\$	43.10
38.51-024-AC	RELAY INTERFACE MODULE, 1CO 6A@250VAC, 24VAC/DC (38.51.0.024.0060)	\$	43.10
38.51-024-DC	RELAY INTERFACE MODULE, 1CO 6A@250VAC, 24VDC (38.51.7.024.0050)	\$	43.10
38.51-024DC-5050	RELAY INTERFACE MODULE, 1CO 6A@250VAC, 24VDC AU/FLASHED (38.51.7.024.5050)	\$	44.30
38.51-048-AC	RELAY INTERFACE MODULE, 1CO 6A@250VAC, 48VAC/DC (38.51.0.048.0060)	\$	43.90
38.51-048-DC	RELAY INTERFACE MODULE, 1CO 6A@250VAC, 48VDC (38.51.7.048.0050)	\$	43.10
38.51-110-AC	RELAY INTERFACE MODULE, 1CO 6A@250VAC, 110VAC/DC (38.51.0.125.0060)	\$	47.50
38.51-110AC-SUPP	RELAY INTERFACE MODULE, 1CO 6A@250VAC, 110VAC LEAK SUPPRESSED (38.51.3.125.060)	\$	71.60
38.51-240-AC	RELAY INTERFACE MODULE, 1CO 6A@250VAC, 240VAC (38.51.0.240.0060)	\$	47.50
38.51-240AC-5060	RELAY INTERFACE MODULE, 1CO 6A@250VAC, 240VAC AU/FLASHED (38.51.0.240.5060)	\$	55.20
38.51-240AC-SUPP	RELAY INTERFACE MODULE, 1CO 6A@250VAC, 240VAC LEAK SUPPRESSED (38.51.3.240.0060)	\$	71.60
38.52-012-DC	RELAY INTERFACE MODULE, 2CO 6A@250VAC, 12VDC	\$	53.00
38.52-024-AC	RELAY INTERFACE MODULE, 2CO 6A@250VAC, 24AC/DC	\$	64.20
38.52-024-DC	RELAY INTERFACE MODULE, 2CO 6A@250VAC, 24VDC	\$	53.00
38.52-110-AC	RELAY INTERFACE MODULE, 2CO 6A@250VAC, 110VAC/DC	\$	68.70
38.52-240-AC	RELAY INTERFACE MODULE, 2CO 6A@250VAC, 240VAC	\$	68.70
38.61-012-AC	RELAY INTERFACE MODULE, SPRING CLAMP, 1CO 6A@250VAC, 12VAC/DC(0060)	\$	43.10
38.61-024-AC	RELAY INTERFACE MODULE, SPRING CLAMP, 1CO 6A@250VAC, 24VAC/DC (0060)	\$	43.10
38.61-024-DC	RELAY INTERFACE MODULE, SPRING CLAMP, 1CO 6A@250VAC, 24VDC	\$	43.10
38.61-240-AC	RELAY INTERFACE MODULE, SPRING CLAMP, 1CO 6A@250VAC, 240VAC	\$	51.00
38.61-240AC-SUPP	RELAY INTERFACE 240VAC, 1CO 6A@250VAC, LEAK SUPPRESSED	\$	89.90
38.81-006-DC	SSR, INTERFACE MODULE, OUTPUT 2A@24VDC, 6VDC CONTROL	\$	78.80
38.81-024-DC	SSR, INTERFACE MODULE, OUTPUT 2A@24VDC, 24VDC CONTROL	\$	78.80
38.81-230VAC/230VAC	SSR, INTERFACE MODULE, OUTPUT 2A@240VAC, 240VAC CONTROL	\$	86.30
38.81-24DC/240VAC	SSR, INTERFACE MODULE, OUTPUT 2A@240VAC, 24VDC CONTROL	\$	82.00
38.81-24DC/48VDC	SSR, INTERFACE MODULE, OUTPUT 0.1A@48VDC, 24VDC CONTROL,	\$	74.00
38.91-024-DC	SSR, INTERFACE MODULE, OUTPUT 2A@24VDC, 24VDC CONTROL, SPRING CLAMP	\$	82.10
38.91-24DC/240VAC	SSR, INTERFACE MODULE, OUTPUT 2A@240VAC, 24VDC CONTROL, SPRING CLAMP	\$	85.30



38 series

### 38/39 Series REPLACEMENT RELAY MODULES

34.51-005-DC	RELAY MODULE FOR 38/39 SERIES - 5VDC	\$	25.80
34.51-012-DC	RELAY MODULE FOR 38/39 SERIES - 12VDC	\$	25.80
34.51-024-DC	RELAY MODULE FOR 38/39 SERIES - 24VDC	\$	25.80
34.51-024DC-4010	RELAY MODULE FOR 38/39 SERIES - 24VDC AgSnO2 CONTACTS	\$	25.80
34.51-024DC-5010	RELAY MODULE FOR 38/39 SERIES - 24VDC AU/FLASHED	\$	25.80
34.51-060-DC	RELAY MODULE FOR 38/39 SERIES - 60VDC	\$	25.80
34.51-060DC-4010	RELAY MODULE FOR 38/39 SERIES - 60VDC AgSnO2 CONTACTS	\$	25.80
34.81-005-DC	SSR MODULE FOR 38/39 SERIES 5VDC/24VDC (34.81.7.005.9024)	\$	57.20
34.81-012-DC	SSR MODULE FOR 38/39 SERIES 12VDC/24VDC (34.81.7.012.9024)	\$	57.20
34.81-024-DC	SSR MODULE FOR 38/39 SERIES 24VDC/24VDC (34.81.7.024.9024)	\$	57.20
34.81-024DC-240AC	SSR MODULE FOR 38/39 SERIES 24VDC/240VAC (34.81.7.024.8240)	\$	57.20
34.81-060-DC	SSR MODULE FOR 38/39 SERIES 60VDC/24VDC (34.81.7.060.9024)	\$	57.70
41.52-012-DC	RELAY, 2 CO 8A@250VAC FOR USE WITH 38.52 RELAY MODULE, 12VDC COIL	\$	31.90
41.52-024-DC	RELAY, 2 CO 8A@250VAC FOR USE WITH 38.52 RELAY MODULE, 24VDC COIL	\$	31.90
41.52-024DC-5010	RELAY, 2 CO 8A@250VAC AU FLASHED, FOR USE WITH 38.52 RELAY MODULE, 24VDC COIL	\$	31.90
41.52-110-DC	RELAY, 2 CO 8A@250VAC FOR USE WITH 38.52 RELAY MODULE, 110VDC COIL	\$	31.90



34.51

### RELAY BASES

93.01.0.024	BASE FOR 38 SERIES I/F RELAY 12/24VAC/DC	\$	34.60
93.01.0.125	BASE FOR 38 SERIES I/F RELAY 110VAC	\$	34.60
93.01.0.240	BASE FOR 38 SERIES I/F RELAY 240VAC	\$	34.60
93.01.7.024	BASE FOR 38 SERIES RELAY 6/12/24/48VDC	\$	34.60
93.02.7.024	BASE FOR 38.52 SERIES DP 6/12/24/48VDC	\$	34.60
93.21-024	TIMER BASE FOR 38 SERIES 12-24VAC/DC 93.21-0-024	\$	83.20

### SPACERS AND TAGS


093.01 SPACER	SPACER-SEPARATOR FOR 38 SERIES RELAYS	\$	3.30
093.48 TAG	ID TAG FOR 38.51/61/81/91 SERIES RELAYS (48 per SHEET)	\$	20.00

### JUMPER LINKS

09308-BUS	JUMPER LINK 8-WAY FOR 38.52 RELAYS	\$	9.00
09320-BLACK	JUMPER LINK 20-WAY FOR 38 SERIES - BLACK	\$	9.80
09320-BLUE	JUMPER LINK 20-WAY FOR 38 SERIES - BLUE	\$	9.80
09320-RED	JUMPER LINK 20-WAY FOR 38 SERIES - RED	\$	9.80

## 39 Series - INTERFACE RELAYS 6mm DIN Rail mount with integral LED & replaceable relay

MASTER SERIES electromechanical relay for general applications, 6.2mm wide

39.11-012-AC/DC	MasterBASIC INTERFACE RELAY, 1CO 6A@250VAC, 12VAC/DC	\$	43.10				
39.11-024-AC/DC	MasterBASIC INTERFACE RELAY, 1CO 6A@250VAC, 24VAC/DC	\$	43.10				
39.20-024-DC	MasterOUTPUT SSR 24VDC, 6A@24VDC LOAD	\$	79.60				
39.20-230-AC	MasterOUTPUT SSR 230VAC, 2A@24VDC LOAD	\$	84.10				
39.20-230VAC/230VAC	MasterOUTPUT SSR 230VAC, 2A@230VAC LOAD	\$	74.00				
39.20-24VDC/230VAC	MasterOUTPUT SSR 24VDC, 2A@230VAC LOAD	\$	74.00				
 <p>39.20</p>							
				39.21-012-AC/DC	MasterOUTPUT RELAY 1NO 6A@250VAC, 12VAC/DC	\$	43.10
				39.21-024-AC/DC	MasterOUTPUT RELAY 1NO 6A@250VAC, 24VAC/DC	\$	43.10
				39.21-125-AC/DC	MasterOUTPUT RELAY 1NO 6A@250VAC, 110-125VAC/DC	\$	49.30
				39.21-230-AC	MasterOUTPUT RELAY 1NO 6A@250VAC, 230VAC	\$	49.30
				39.30-024-DC	MasterPLUS SSR 24VAC/DC, 6A@ 24VDC LOAD, FUSABLE	\$	79.60
				39.30-230-AC	MasterPLUS SSR 230VAC, 2A@230VAC LOAD, FUSABLE	\$	84.10
				39.30-230VAC/230VAC	MasterPLUS SSR 230VAC, 2A@230VAC LOAD, FUSABLE	\$	74.00
				39.30-24VDC/230VAC	MasterPLUS SSR 24V/DC, 2A@230VAC LOAD, FUSABLE	\$	74.00
				39.31-006-AC/DC	MasterPLUS RELAY, 1CO 6A@250VAC, FUSABLE, 6VAC/DC	\$	43.10
39.31-012-AC/DC	MasterPLUS RELAY, 1CO 6A@250VAC, FUSABLE, 12VAC/DC	\$	43.10				
39.31-125-AC/DC	MasterPLUS RELAY, 1CO 6A@250VAC, FUSABLE, 110-125VAC/DC	\$	49.30				
39.31-230-AC	MasterPLUS RELAY, 1CO 6A@250VAC, FUSABLE, 230VAC	\$	75.60				
39.31-24-240AC/DC	MasterPLUS RELAY, 1CO 6A@250VAC, FUSABLE, 24-240VAC/DC	\$	75.60				

### MasterINPUTS Electromechanical Relay Interface

for Sensors etc and controllers or PLCs, with optional fuse module (20 x 5mm) up to 2A with visible fuse condition window

39.40-024-DC	MasterINPUT SSR 24VAC/DC, 6A@24VDC LOAD, 3 TERMINAL INPUT	\$	84.10
39.40-230-AC	MasterINPUT SSR 230VAC, 2A@240VAC LOAD, 3 TERMINAL INPUT	\$	84.10
39.40-230VAC/230VAC	MasterINPUT SSR 230VAC, 2A@240VAC LOAD, 3 TERMINAL INPUT	\$	74.00
39.40-24VDC/230VAC	MasterINPUT SSR 24VDC, 2A@240VAC LOAD, 3 TERMINAL INPUT	\$	87.30

### MasterINPUTS Electromechanical Relay Interface

for Sensors etc and controllers or PLCs, with optional fuse module (20 x 5mm) up to 6A with visible fuse condition window

39.41-012-AC/DC	MasterINPUT RELAY, 1CO 6A@250VAC AU CONTACT, 12VAC/DC	\$	47.60
39.41-024-AC/DC	MasterINPUT RELAY, 1CO 6A@250VAC AU CONTACT, 24VAC/DC	\$	47.60
39.41-125-AC/DC	MasterINPUT RELAY, 1CO 6A@250VAC AU CONTACT, 110 VAC/DC	\$	57.00
39.41-230-AC	MasterINPUT RELAY, 1CO 6A@250VAC AU CONTACT, 230VAC,	\$	57.00



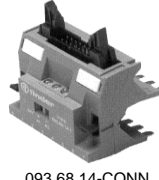
### MasterINPUTS Electromechanical Relay Interface

0.1s - 6hr, 6.2mm wide, with optional fuse module (20 x 5mm) up to 6A featuring visible fuse condition window, accepts 34.51 electromechanical relay or 34.81 solid state

93.68-024	MasterTIMER BASE FOR 39 SERIES 24VAC/DC, SPDT 6A	\$	74.00
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### MasterINTERFACE accessories

093.68.14-CONN	MasterADAPTOR 8-WAY CONNECTOR	\$	74.40
093.16	JUMPER LINK 16-WAY FOR 39 SERIES RELAYS - BLUE	\$	9.80
093.16.0	JUMPER LINK 16-WAY FOR 39 SERIES RELAYS - BLACK	\$	9.80
093.16.1	JUMPER LINK 16-WAY FOR 39 SERIES RELAYS - RED	\$	9.80
093.48 TAG	ID TAG FOR 38.51/61/81/91 SERIES RELAYS (48 per SHEET)	\$	20.00
093.60 SPACER	SPACER/SEPARATOR FOR 39 SERIES RELAY	\$	3.30
093.63-FUSE	FUSE CARRIER FOR MasterPLUS RELAYS	\$	11.90
060.72-TAG	ID TAGS FOR 38/39 SERIES, 72 PER SHEET	\$	32.40
34.51-005-DC	RELAY MODULE FOR 38/39 SERIES - 5VDC	\$	25.80
34.51-012-DC	RELAY MODULE FOR 38/39 SERIES - 12VDC	\$	25.80
34.51-024-DC	RELAY MODULE FOR 38/39 SERIES - 24VDC	\$	25.80
34.51-060-DC	RELAY MODULE FOR 38/39 SERIES - 60VDC	\$	25.80
34.81-005-DC	SSR MODULE FOR 38/39 SERIES 5VDC/24VDC (34.81.7.005.9024)	\$	57.20
34.81-012-DC	SSR MODULE FOR 38/39 SERIES 12VDC/24VDC (34.81.7.012.9024)	\$	57.20
34.81-024-DC	SSR MODULE FOR 38/39 SERIES 24VDC/24VDC (34.81.7.024.9024)	\$	57.20
34.81-024DC-240AC	SSR MODULE FOR 38/39 SERIES 24VDC/240VAC (34.81.7.024.8240)	\$	57.20
34.81-060-DC	SSR MODULE FOR 38/39 SERIES 60VDC/24VDC (34.81.7.060.9024)	\$	57.70



## 40 Series - PLUG-IN RELAYS

### 40 Series Slimline Relays – Base/PCB Mounting

40.31-006-DC	RELAY 1 CO 10A@250VAC, 6VDC COIL	\$ 19.10
40.31-012-AC	RELAY 1 CO 10A@250VAC, 12VAC COIL	\$ 19.10
40.31-012-DC	RELAY 1 CO 10A@250VAC, 12VDC COIL	\$ 19.10
40.31-024-AC	RELAY 1 CO 10A@250VAC, 24VAC COIL	\$ 19.10
40.31-024-DC	RELAY 1 CO 10A@250VAC, 24VDC COIL	\$ 19.10
40.31-048-AC	RELAY 1 CO 10A@250VAC, 48VAC COIL	\$ 19.10
40.31-048-DC	RELAY 1 CO 10A@250VAC, 48VDC COIL	\$ 19.10
40.31-110-AC	RELAY 1 CO 10A@250VAC, 110VAC COIL	\$ 22.40
40.31-110-DC	RELAY 1 CO 10A@250VAC, 110VDC COIL	\$ 22.40
40.31-240-AC	RELAY 1 CO 10A@250VAC, 240VAC COIL	\$ 22.40
40.51-009-DC	RELAY 1 CO 10A@250VAC, 9VDC COIL	\$ 19.10
40.51-024-AC	RELAY 1 CO 10A@250VAC, 24VAC COIL	\$ 22.40
40.51-024-DC	RELAY 1 CO 10A@250VAC, 24VDC COIL	\$ 19.10
40.51-110-DC	RELAY 1 CO 10A@250VAC, 110VAC COIL	\$ 22.40
40.52-012-AC	RELAY 2 CO 8A@250VAC, 12VAC COIL	\$ 19.10
40.52-012-DC	RELAY 2 CO 8A@250VAC, 12VDC COIL	\$ 19.10
40.52-018-DC	RELAY 2 CO 8A@250VAC, 18VDC COIL	\$ 19.10
40.52-024-AC	RELAY 2 CO 8A@250VAC, 24VAC COIL	\$ 19.10
40.52-024-DC	RELAY 2 CO 8A@250VAC, 24VDC COIL	\$ 19.10
40.52-024DC-5000	RELAY 2 CO 8A@250VAC, AU FLASHED CONTACT, 24VDC COIL	\$ 32.10
40.52-048-AC	RELAY 2 CO 8A@250VAC, 48VAC COIL	\$ 19.10
40.52-048-DC	RELAY 2 CO 8A@250VAC, 48VDC COIL	\$ 19.10
40.52-110-AC	RELAY 2 CO 8A@250VAC, 110VAC COIL	\$ 22.40
40.52-110-DC	RELAY 2 CO 8A@250VAC, 110VDC COIL	\$ 22.40
40.52-120-AC	RELAY 2 CO 8A@250VAC, 120VAC COIL	\$ 22.40
40.52-240-AC	RELAY 2 CO 8A@250VAC, 240VAC COIL	\$ 22.40
40.52-4.5-DC	RELAY 2 CO 8A@250VAC, 4.5VDC COIL	\$ 19.10
40.61-012-AC	RELAY 1 CO 16A@250VAC, 12VAC COIL	\$ 19.10
40.61-012-DC	RELAY 1 CO 16A@250VAC, 12VDC COIL	\$ 19.10
40.61-014-DC	RELAY 1 CO 16A@250VAC, 14VDC COIL	\$ 19.10
40.61-024-AC	RELAY 1 CO 16A@250VAC, 24VAC COIL	\$ 19.10
40.61-024-DC	RELAY 1 CO 16A@250VAC, 24VDC COIL	\$ 19.10
40.61-024DC-4000	RELAY 1 CO 16A@250VAC AgSnO2, 24VDC COIL	\$ 19.10
40.61-230-AC	RELAY 1 CO 16A@250VAC, 230VAC COIL	\$ 22.40
40.61BI-012-DC	RELAY, BISTABLE, 1 CO 16A@250VAC, 12VDC COIL	\$ 25.70
41.52-012-DC	RELAY, 2 CO 8A@250VAC FOR USE WITH 38.52 RELAY MODULE, 12VDC COIL	\$ 31.90
41.52-024-AC	RELAY, 2 CO 8A@250VAC FOR USE WITH 38.52 RELAY MODULE, 24VDC COIL	\$ 31.90
41.52-024DC-5010	RELAY, 2 CO 8A@250VAC AU FLASHED, FOR USE WITH 38.52 RELAY MODULE, 24VDC COIL	\$ 31.90
41.52-110-DC	RELAY, 2 CO 8A@250VAC FOR USE WITH 38.52 RELAY MODULE, 110VDC COIL	\$ 31.90
41.61.9.048.0311	PCB RELAY, LOW-PROFILE, 1 NO 16A@250VAC, 48VDC COIL	\$ 31.90
41.61-012-DC	PCB RELAY, LOW-PROFILE, 1 CO 16A@250VAC, 12VDC COIL	\$ 31.90
41.61-024-DC	PCB RELAY, LOW-PROFILE, 1 CO 16A@250VAC, 24VDC COIL	\$ 31.90
41.61-024DC-4010	PCB RELAY, LOW-PROFILE, 1 CO 16A@250VAC AgSnO2, 24VDC COIL	\$ 40.30
41.61-110-DC	PCB RELAY, LOW-PROFILE, 1 CO 16A@250VAC, 110VDC COIL	\$ 31.90
41.81-024-DC	SSR MODULE 5A 24VDC/24VDC, FOR RELAY FOR 38.31	\$ 61.40



40 Series

### 40 Series Bases

BASE95-03	BASE, DIN RAIL FOR 40.31 RELAYS - 3mm PITCH	\$ 16.60
BASE95-03	BASE, DIN RAIL FOR 40.31 RELAYS - 3mm PITCH	\$ 16.60
BASE95-03	BASE, DIN RAIL FOR 40.31 RELAYS - 3mm PITCH	\$ 16.60
BASE95-03	BASE, DIN RAIL FOR 40.31 RELAYS - 3mm PITCH	\$ 16.60

### 46 Series Slimline Relays – Lockable Test Button and LED Indication (G2R Equivalent)

46.52-012-AC	RELAY, LED & TEST BUTTON, 2 CO 8A@250VAC, 12VAC COIL	\$ 29.80
46.52-012-DC	RELAY, LED & TEST BUTTON, 2 CO 8A@250VAC, 12VDC COIL	\$ 29.80
46.52-024-AC	RELAY, LED & TEST BUTTON, 2 CO 8A@250VAC, 24VAC COIL	\$ 29.80
46.52-024AC-5054	RELAY, LED & TEST BUTTON, 1 CO 16A@250VAC AU FLASHED, 24VAC COIL	\$ 39.80
46.52-024-DC	RELAY, LED & TEST BUTTON, 2 CO 8A@250VAC, 24VDC COIL	\$ 29.80
46.52-024DC-5074	RELAY, LED & TEST BUTTON, 1 CO 16A@250VAC AU FLASHED, 24VDC COIL	\$ 38.60
46.52-048-AC	RELAY, LED & TEST BUTTON, 2 CO 8A@250VAC, 48VAC COIL	\$ 29.80
46.52-048-DC	RELAY, LED & TEST BUTTON, 2 CO 8A@250VAC, 48VDC COIL	\$ 29.80
46.52-110-AC	RELAY, LED & TEST BUTTON, 2 CO 8A@250VAC, 110VAC COIL	\$ 29.80
46.52-110-DC	RELAY, LED & TEST BUTTON, 2 CO 8A@250VAC, 110VDC COIL	\$ 29.80
46.52-230-AC	RELAY, LED & TEST BUTTON, 2 CO 8A@250VAC, 230VAC COIL	\$ 29.80
46.61-012-AC	RELAY, LED & TEST BUTTON, 1 CO 16A@250VAC, 12VAC COIL	\$ 29.80
46.61-012-DC	RELAY, LED & TEST BUTTON, 1 CO 16A@250VAC, 12VDC COIL	\$ 29.80
46.61-012DC-5074	RELAY, LED & TEST BUTTON, 1 CO 16A@250VAC AU FLASHED, 12VDC COIL	\$ 38.60
46.61-024-AC	RELAY, LED & TEST BUTTON, 1 CO 16A@250VAC, 24VAC COIL	\$ 29.80
46.61-024-DC	RELAY, LED & TEST BUTTON, 1 CO 16A@250VAC, 24VDC COIL	\$ 29.80
46.61-024DC-5074	RELAY, LED & TEST BUTTON, 1 CO 16A@250VAC AU FLASHED, 24VDC COIL	\$ 38.60
46.61-048-AC	RELAY, LED & TEST BUTTON, 1 CO 16A@250VAC, 48VAC COIL	\$ 29.80
46.61-048-DC	RELAY, LED & TEST BUTTON, 1 CO 16A@250VAC, 48VDC COIL	\$ 29.80
46.61-110-AC	RELAY, LED & TEST BUTTON, 1 CO 16A@250VAC, 110VAC COIL	\$ 29.80
46.61-230-AC	RELAY, LED & TEST BUTTON, 1 CO 16A@250VAC, 230VAC COIL	\$ 29.80



46 Series

### 46 Series Bases

BASE97-01	BASE, DIN RAIL FOR 46.61 RELAYS	\$ 16.60
BASE97-02	BASE, DIN RAIL FOR 46.52 RELAYS	\$ 16.60
BASE97-11	BASE, PCB MOUNT FOR 46.61 SERIES RELAYS	\$ 8.20
BASE97-51	BASE, DIN RAIL FOR 46.61 RELAYS - SPRING CLAMP TYPE	\$ 20.30
BASE97-52	BASE, DIN RAIL FOR 46.52 RELAYS - SPRING CLAMP TYPE	\$ 22.60



## 13 Series Flush Box Interposing Relay

Relay fits inside a flush box to interface high power loads with low voltage controls. 12A SPNO contact

13.31-012-AC	INTERPOSING RELAY, FLUSHBOX TYPE, 1 NO 12A, 12VAC COIL	\$ 64.80
13.31-024-DC	INTERPOSING RELAY, FLUSHBOX TYPE, 1 NO 12A, 24VDC COIL	\$ 64.80
13.31-230-AC	INTERPOSING RELAY, FLUSHBOX TYPE, 1 NO 12A, 230VAC COIL	\$ 64.80



13.31



## 50 Series Flat-Pin Relays with Lockable Test Button and Led Indication

55.32-012-AC	RELAY 12VAC, LED & TEST BUTTON, 2 CO 10A@250VAC, AU FLASHED	\$	35.00
55.32-012-DC	RELAY 12VDC, LED & TEST BUTTON, 2 CO 10A@250VAC, AU FLASHED	\$	35.00
55.32-024-AC	RELAY 24VAC, LED & TEST BUTTON, 2 CO 10A@250VAC, AU FLASHED	\$	35.00
55.32-024AC-5040	RELAY 24VAC, 2 CO 10A@250VAC, AU FLASHED	\$	35.00
55.32-024-DC	RELAY 24VDC, LED & TEST BUTTON, 2 CO 10A@250VAC, AU FLASHED	\$	35.00
55.32-048-DC-0090	RELAY 48VDC, LED & TEST BUTTON, 2 CO 10A@250VAC	\$	35.00
55.32-110-AC	RELAY 110VAC, LED & TEST BUTTON, 2 CO 10A@250VAC, AU FLASHED	\$	35.00
55.32-110-DC	RELAY 110VDC, LED & TEST BUTTON, 2 CO 10A@250VAC	\$	35.00
55.32-125-DC	RELAY 125VDC, LED & TEST BUTTON, 2 CO 10A@250VAC	\$	35.00
55.32-12VAC	RELAY 12VAC, 2 CO10A@250VAC	\$	35.00
55.32-240-AC	RELAY 240VAC, LED & TEST BUTTON, 2 CO 10A@250VAC	\$	35.00
55.32-240-AC-0050	RELAY 240VAC, LED & TEST BUTTON, 2 CO 10A@250VAC	\$	35.00
55.33-012-DC	RELAY 12VDC, LED & TEST BUTTON, 3 CO 10A@250VAC	\$	32.40
55.33-110-DC	RELAY 110VDC, LED & TEST BUTTON, 3 CO 10A@250VA	\$	32.40
55.33-230-AC	RELAY 230VAC, LED & TEST BUTTON, 3 CO 10A@250VA	\$	32.40
55.34-006-DC	RELAY 6VDC, LED & TEST BUTTON, 4 CO 7A@250VA	\$	50.80
55.34-012-AC	RELAY 12VAC, LED & TEST BUTTON, 4 CO 7A@250VA, AU FLASHED	\$	47.00
55.34-012-DC	RELAY 12VDC, LED & TEST BUTTON, 4 CO 7A@250VA, AU FLASHED	\$	47.00
55.34-024-AC	RELAY 24VAC, LED & TEST BUTTON, 4 CO 7A@250VA, AU FLASHED	\$	47.00
55.34-024-DC	RELAY 24VDC, LED & TEST BUTTON, 4 CO 7A@250VA, AU FLASHED	\$	47.00
55.34-024-DC-0090	RELAY 24VDC, MECHANICAL INDICATOR & TEST BUTTON, 4 CO 7A@250VA	\$	47.00
55.34-024-DC-5090	RELAY 24VDC, LED & TEST BUTTON, 4 CO 7A@250VA, AU FLASHED	\$	47.00
55.34-048-AC	RELAY 48VAC, LED & TEST BUTTON, 4 CO 7A@250VA, AU FLASHED	\$	47.00
55.34-048-DC-0090	RELAY 48VDC, LED & TEST BUTTON, 4 CO 7A@250VA	\$	47.00
55.34-060-DC	RELAY 60VDC, LED & TEST BUTTON, 4 CO 7A@250VA, AU FLASHED	\$	47.00
55.34-110-AC	RELAY 110VAC, LED & TEST BUTTON, 4 CO 7A@250VA, AU FLASHED	\$	47.00
55.34-110-DC	RELAY 110VDC, LED & TEST BUTTON, 4 CO 7A@250VA	\$	47.00
55.34-125-DC	RELAY 125VDC, LED & TEST BUTTON, 4 CO 7A@250VA	\$	47.00
55.34-230-AC	RELAY 230VAC, LED & TEST BUTTON, 4 CO 7A@250VA	\$	47.00
55.34-24DC-STD	RELAY 24VDC, 4 CO 7A@250VA	\$	47.00
55.34D-024-DC	RELAY 24VDC, DIODE, 4 CO 7A@250VA	\$	47.00
55.34D-110-DC	RELAY 110VDC, DIODE, 4 CO 7A@250VA	\$	47.00
55.34HS-024-DC	RELAY 24VDC, 4 CO 7A@250VA	\$	32.40



55 series

### 50 Series Bases

BASE94-02	BASE, DIN RAIL FOR 55.32 RELAYS	\$	16.60
BASE94-04	BASE, DIN RAIL FOR 55.34 RELAYS	\$	16.60
BASE94-12	BASE, PCB MOUNT FOR 55.32 RELAYS	\$	7.40
BASE94-14	BASE, PCB MOUNT FOR 55.34 RELAYS	\$	7.40
BASE94-54.1	BASE, DIN RAIL FOR 55.34 RELAYS - SPRING CLAMP TYPE	\$	27.80
BASE94-72	BASE, DIN RAIL FOR 55.32 RELAYS	\$	18.30
BASE94-73	BASE, DIN RAIL FOR 55.33 RELAYS	\$	18.30
BASE94-74	BASE, DIN RAIL FOR 55.34 RELAYS	\$	18.30
BASE94-82	BASE, DIN RAIL FOR 55.32 RELAYS	\$	18.30
BASE96-02	BASE, DIN RAIL FOR 56.32 RELAYS	\$	16.60
BASE96-04	BASE, DIN RAIL FOR 56.34 RELAYS	\$	24.80
BASE96-12	BASE, PCB MOUNT FOR 56.32 RELAYS	\$	7.40
BASE96-14	BASE, PCB MOUNT FOR 56.34 RELAYS	\$	7.40
BASE96-72	BASE, DIN RAIL FOR 56.32 RELAYS	\$	19.60
BASE96-74	BASE, DIN RAIL FOR 56.34 RELAYS	\$	24.80



Base 95-04

## 60 Series 8 & 11 Round-Pin Relays, Lockable Test Button and LED.

60.12-012-AC	RELAY 8 PIN, MECH INDICATOR & TEST BUTTON, 2 CO 10A@250VAC, 12VAC COIL	\$ 37.20
60.12-012-DC	RELAY 8 PIN, MECH INDICATOR & TEST BUTTON, 2 CO 10A@250VAC, 12VDC COIL	\$ 37.20
60.12-024-AC	RELAY 8 PIN, MECH INDICATOR & TEST BUTTON, 2 CO 10A@250VAC, 24VAC COIL	\$ 37.20
60.12-024-DC	RELAY 8 PIN, MECH INDICATOR & TEST BUTTON, 2 CO 10A@250VAC, 24VDC COIL	\$ 37.20
60.12-048-AC	RELAY 8 PIN, MECH INDICATOR & TEST BUTTON, 2 CO 10A@250VAC, 48VAC COIL	\$ 37.20
60.12-048-DC	RELAY 8 PIN, MECH INDICATOR & TEST BUTTON, 2 CO 10A@250VAC, 48VDC COIL	\$ 37.20
60.12-060-DC	RELAY 8 PIN, MECH INDICATOR & TEST BUTTON, 2 CO 10A@250VAC, 48VDC COIL	\$ 37.20
60.12-110-AC	RELAY 8 PIN, MECH INDICATOR & TEST BUTTON, 2 CO 10A@250VAC, 110VAC COIL	\$ 37.20
60.12-230-AC	RELAY 8 PIN, MECH INDICATOR & TEST BUTTON, 2 CO 10A@250VAC, 230VAC COIL	\$ 37.20
60.12-400-AC	RELAY 8 PIN, MECH INDICATOR & TEST BUTTON, 2 CO 10A@250VAC, 400VAC COIL	\$ 37.20
60.13-012-AC	RELAY 11 PIN, MECH INDICATOR & TEST BUTTON, 3 CO 10A@250VAC, 12VAC COIL	\$ 40.70
60.13-012-DC	RELAY 11 PIN, MECH INDICATOR & TEST BUTTON, 3 CO 10A@250VAC, 12VDC COIL	\$ 40.70
60.13-024-AC	RELAY 11 PIN, MECH INDICATOR & TEST BUTTON, 3 CO 10A@250VAC, 24VAC COIL	\$ 40.70
60.13-024-DC	RELAY 11 PIN, MECH INDICATOR & TEST BUTTON, 3 CO 10A@250VAC, 24VDC COIL	\$ 40.70
60.13-048-AC	RELAY 11 PIN, MECH INDICATOR & TEST BUTTON, 3 CO 10A@250VAC, 48VAC COIL	\$ 40.70
60.13-048-DC	RELAY 11 PIN, MECH INDICATOR & TEST BUTTON, 3 CO 10A@250VAC, 48VDC COIL	\$ 40.70
60.13-060-DC	RELAY 11 PIN, MECH INDICATOR & TEST BUTTON, 3 CO 10A@250VAC, 60VDC COIL	\$ 40.70
60.13-080-DC	RELAY 11 PIN, MECH INDICATOR & TEST BUTTON, 3 CO 10A@250VAC, 80VDC COIL	\$ 40.70
60.13-110-AC	RELAY 11 PIN, MECH INDICATOR & TEST BUTTON, 3 CO 10A@250VAC, 110VAC COIL	\$ 40.70
60.13-110-DC	RELAY 11 PIN, MECH INDICATOR & TEST BUTTON, 3 CO 10A@250VAC, 110VDC COIL	\$ 40.70
60.13-230-AC	RELAY 11 PIN, MECH INDICATOR & TEST BUTTON, 3 CO 10A@250VAC, 230VAC COIL	\$ 40.70



60 series

### 60 Series Bases

BASE90-02	BASE, 8 PIN, SOLDER TERMINALS FOR 60.12 RELAYS	\$ 16.60
BASE90-03	BASE, DIN RAIL, 11-PIN FOR 60.13 RELAYS AND 86.00 TIMER	\$ 16.60
BASE90-12	BASE, 8 PIN, SOLDER TERMINALS, FOR 60.12 RELAYS	\$ 5.50
BASE90-13	BASE, 11 PIN, SOLDER TERMINALS, FOR 60.13 RELAYS	\$ 5.50
BASE90-14	BASE, PCB MOUNT FOR 8 PIN, 60.12 RELAYS	\$ 7.40
BASE90-14.1	BASE, PCB MOUNT FOR 8 PIN, 60.12 RELAYS, 17.5mm	\$ 7.40
BASE90-15	BASE, PCB MOUNT FOR 11 PIN, 60.13 RELAYS	\$ 7.40
BASE90-15.1	BASE, PCB MOUNT FOR 11 PIN, 60.13 RELAYS	\$ 5.50
BASE90-20	BASE, DIN RAIL 8 PIN FOR 60.12 RELAYS	\$ 16.60
BASE90-21	BASE, DIN RAIL 11 PIN FOR 60.13 RELAYS	\$ 16.60



Base 90-20

### Plug-in Timers for 60 Series Bases

86.30-024	MULTIFUNCTION TIMER MODULE, 12-24VAC/DC, USE WITH 90, 92, 94, 95, 96, 97 SOCKETS	\$ 68.70
86.30-230	MULTIFUNCTION TIMER MODULE, 230VAC, USE WITH 90, 92, 94, 95, 96, 97 SOCKETS	\$ 69.20
86.60-100	MULTIFUNCTION TIMER MODULE 12-90VAC/DC	\$ 152.60

### Accessory Modules for Relay Bases

99.02-024-09	RC MODULE 6-24VAC/DC, 90/94/95/96/97 SERIES BASES	\$ 16.60
99.02-024-59	LED MODULE 24VAC/DC 90/94/95/96/97 SERIES BASES	\$ 16.60
99.02-024-79	GREEN LED + DIODE MODULE 6-24VDC INV POLARITY 90/94/95/96/97 SERIES BASES	\$ 16.60
99.02-024-98	GREEN LED/VARISTOR MODULE 6-24VAC/DC, 90/94/95/96/97 SERIES BASES	\$ 16.60
99.02-024-99	LED + DIODE MODULE 6-24VDC STD POLARITY, 90/94/95/96/97 SERIES BASES	\$ 16.60
99.02-060-59	LED MODULE 28-60VAC/DC, 90/94/95/96/97 SERIES BASES	\$ 16.60
99.02-230-07	RC BY-PASS MODULE 110-230V, 90/94/95/96/97 SERIES BASES	\$ 16.60
99.02-230-09	RC MODULE 230VAC, 90/94/95/96/97 SERIES BASES	\$ 16.60
99.02-230-59	LED MODULE 110-240VAC/DC, 90/94/95/96/97 SERIES BASES	\$ 16.60
99.02-3000	DIODE MODULE 6-220VDC, 90/94/95/96/97 SERIES BASES	\$ 16.60



### Power Relays

62.22-0300-110DC	POWER RELAY PCB MOUNT, 2 NO 16A@250VAC, 110VDC COIL	\$ 40.70
62.22-0300-230AC	POWER RELAY PCB MOUNT, 2 NO 16A@250VAC, 230VAC COIL	\$ 40.70
62.22-060-DC	POWER RELAY PCB MOUNT, 2 CO 16A@250VAC, 60VDC COIL	\$ 40.70
62.22-230-AC	POWER RELAY PCB MOUNT, 2 CO 16A@250VAC, 230VAC COIL	\$ 40.70
62.23-012-DC	POWER RELAY PCB MOUNT, 2 CO 16A@250VAC, 12VDC COIL	\$ 40.70
62.23-024-DC	POWER RELAY PCB MOUNT, 2 CO 16A@250VAC, 24VDC COIL	\$ 40.70
62.23-0300-12DC	POWER RELAY PCB MOUNT, 3 NO 16A@250VAC, 12VDC COIL	\$ 40.70
62.23-0300-230AC	POWER RELAY PCB MOUNT, 3 NO 16A@250VAC, 230VAC COIL	\$ 40.70
62.31-4800-24VDC	POWER RELAY PCB MOUNT, 1 CO 16A@250VAC, MAG BLOWOUT, 24VDC COIL	\$ 46.60
62.32-230AC-SELV	POWER RELAY PCB MOUNT, 2 CO 16A@250VAC, SELV SEPARATION, 24VDC COIL	\$ 46.60
62.32-4800-125VDC	POWER RELAY PCB MOUNT, 2 CO 16A@250VAC, MAG BLOWOUT, 125VDC COIL	\$ 46.60
62.32-4800-24VDC	POWER RELAY PCB MOUNT, 2 CO 16A@250VAC, MAG BLOWOUT, 24VDC COIL	\$ 46.60
62.33-024-DC	POWER RELAY PCB MOUNT, 3 CO 16A@250VAC, 24VDC COIL	\$ 40.70
62.33-0300-024DC	POWER RELAY PCB MOUNT, 3 NO 16A@250VAC, 24VDC COIL	\$ 40.70
62.82-024-AC	POWER RELAY FLANGE MOUNT, 2 CO 16A@250VAC, 24VAC COIL	\$ 40.70
62.82-024-DC	POWER RELAY FLANGE MOUNT, 2 CO 16A@250VAC, 24VDC COIL	\$ 40.70
62.82-0300-230AC	POWER RELAY FLANGE MOUNT, 2 NO 16A@250VAC, 230VAC COIL	\$ 40.70
62.82-230-0005	POWER RELAY FLANGE MOUNT, LED & TEST BUTTON, 2 CO 16A@250VAC, 230VAC COIL	\$ 48.10
62.82-230-AC	POWER RELAY FLANGE MOUNT, 2 CO 16A@250VAC, 230VAC COIL	\$ 40.70
62.83-0300-024AC	POWER RELAY FLANGE MOUNT, 3 NO 16A@250VAC, 24VAC COIL	\$ 40.70
62.83-230-AC	POWER RELAY FLANGE MOUNT, 3 CO 16A@250VAC, 230VAC COIL	\$ 40.70
62.83-230AC-4000	POWER RELAY FLANGE MOUNT, 3 CO 16A@250VAC AgSNO <sub>2</sub> , 230VAC COIL	\$ 46.60
62.83-400-AC	POWER RELAY FLANGE MOUNT, 3 CO 16A@250VAC, 400VAC COIL	\$ 59.60
65.31-024-DC	POWER RELAY FLANGE MOUNT 24VDC, 1 NO +1 NC 20A@250VAC	\$ 40.70
65.31-0300-012DC	POWER RELAY FLANGE MOUNT 12VDC, 1 NO 30A@250VAC	\$ 40.70
65.31-0300-024AC	POWER RELAY FLANGE MOUNT 24VAC, 1 NO 30A@250VAC	\$ 40.70
65.31-0300-024DC	POWER RELAY FLANGE MOUNT 24VDC, 1 NO 30A@250VAC	\$ 40.70
65.31-0300-230AC	POWER RELAY FLANGE MOUNT 230VAC, 1 NO 30A@250VAC	\$ 40.70
65.31-230-AC	POWER RELAY FLANGE MOUNT 230VAC, 1 NO +1 NC 20A@250VAC	\$ 40.70
66.22-012-DC	POWER RELAY PCB MOUNT 12VDC, 2 CO 30A@250VAC NO, 10A@250VAC NC	\$ 54.80
66.82-012-AC	POWER RELAY FLANGE MOUNT 12VAC, 2 CO 30A@250VAC NO, 10A@250VAC NC	\$ 54.80
66.82-012-DC	POWER RELAY FLANGE MOUNT 12VDC, 2 CO 30A@250VAC NO, 10A@250VAC NC	\$ 54.80
66.82-024-AC	POWER RELAY FLANGE MOUNT 24VAC, 2 CO 30A@250VAC NO, 10A@250VAC NC	\$ 54.80
66.82-024-DC	POWER RELAY FLANGE MOUNT 24VDC, 2 CO 30A@250VAC NO, 10A@250VAC NC	\$ 54.80
66.82-110-AC	POWER RELAY FLANGE MOUNT 110VAC, 2 CO 30A@250VAC NO, 10A@250VAC NC	\$ 58.00
66.82-240-AC	POWER RELAY FLANGE MOUNT 240VAC, 2 CO 30A@250VAC NO, 10A@250VAC NC	\$ 58.00
66.82-24DC-DIN	RELAY 2-POLE C/O 30A 24VDC DIN MOUNTING	\$ 58.00



65.31




66.82

### Accessories



062.10	MOUNTING ADAPTOR FOR 62 SERIES RELAYS, M4 THREAD	\$ 6.90
066.07 DINCLIP	DIN RAIL MOUNT CLIP FOR 66.82 RELAYS	\$ 5.80

## 22 Series DIN Rail Mount Monostable Power Relays

22.22-012-AC		MONOSTABLE RELAY 2 NO 20A, 12VAC COIL	\$	69.60
22.22-012-DC		MONOSTABLE RELAY 2 NO 20A, 12VDC COIL	\$	69.60
22.22-024-AC		MONOSTABLE RELAY 2 NO 20A, 24VAC COIL	\$	69.60
22.22-024-DC		MONOSTABLE RELAY 2 NO 20A, 24VDC COIL	\$	69.60
22.22-110-AC		MONOSTABLE RELAY 2 NO 20A, 110VAC COIL	\$	69.60
22.22-230-AC		MONOSTABLE RELAY 2 NO 20A, 230VAC COIL	\$	69.60
22.23-012-AC		MONOSTABLE RELAY 1 NO +1 NC 20A, 12VAC COIL	\$	69.60
22.23-012-DC		MONOSTABLE RELAY 1 NO +1 NC 20A, 12VDC COIL	\$	69.60
22.23-024-AC		MONOSTABLE RELAY 1 NO +1 NC 20A, 24VAC COIL	\$	69.60
22.23-024-DC		MONOSTABLE RELAY 1 NO +1 NC 20A, 24VDC COIL	\$	69.60
22.23-110-AC	MONOSTABLE RELAY 1 NO +1 NC 20A, 110VAC COIL	\$	69.60	
22.23-230-AC	MONOSTABLE RELAY 1 NO +1 NC 20A, 230VAC COIL	\$	69.60	
22.24-012-DC	MONOSTABLE RELAY 2 NC 20A, 12VDC COIL	\$	69.60	
22.24-024-AC	MONOSTABLE RELAY 2 NC 20A, 24VAC COIL	\$	69.60	
22.24-024-DC	MONOSTABLE RELAY 2 NC 20A, 24VDC COIL	\$	69.60	
22.24-230-AC	MONOSTABLE RELAY 2 NC 20A, 230VAC COIL	\$	69.60	

## CEL DIN RAIL Mounted Relay Modules

The RM series of relay interface modules provide a compact, labour-saving solution for multiple relay connections. The RM series are manufactured by Carrel-Electrade Ltd, using the

RM-8WAY-24VAC		8 WAY FUSED (10A MAX) RELAY INTERFACE MODULE, 24VAC	\$	319.40
RM-8WAY-24VDC		8 WAY FUSED (10A MAX) RELAY INTERFACE MODULE, 24VDC	\$	297.60
RM-8WAY-SL-24VDC		8 WAY SLIMLINE 6A RELAY INTERFACE MODULE, 24VDC	\$	395.00
RM-8WAYS-SSR-24VDC		8 WAY FUSED (2A MAX) SSR RELAY INTERFACE MODULE, 24VDC	\$	531.40
RM-10WAY-24VDC		10 WAY FUSED (10A MAX) RELAY INTERFACE MODULE, 24VDC	\$	391.50
RM-16WAY-24VDC		16 WAY FUSED (10A MAX) RELAY INTERFACE MODULE, 24VDC	\$	555.40
RM-16WAY-SSR-24VDC		16 WAY FUSED (2A MAX) SSR RELAY INTERFACE MODULE, 24VDC	\$	1,023.00
RM-20WAY-24VDC	RM-8 WAY	20 WAY FUSED (10A MAX) RELAY INTERFACE MODULE, 24VDC	\$	687.20
RM-32WAY-24VDC		32 WAY FUSED (10A MAX) RELAY INTERFACE MODULE, 24VDC	\$	1,038.30
RM-32WAY-SSR-24VDC		32 WAY FUSED (2A MAX) SSR RELAY INTERFACE MODULE, 24VDC	\$	1,916.20
RM-8WAY-MB-24VDC		8 WAY RELAY INTERFACE MODULE, 24VDC - WITH MODBUS COMMS OUTPUT	\$	582.50
RM-16WAY-MB-24VDC		16 WAY RELAY INTERFACE MODULE WITH MODBUS COMMS OUTPUT, 24VDC	\$	733.40
RM-CABLE-14WAY-2M		RELAY MODULE RIBBON CABLE 14 WAY IDC CONNECTORS - 2M	\$	46.20
RM-CABLE-20WAY-2M		RELAY MODULE RIBBON CABLE 20 WAY IDC CONNECTORS - 2M	\$	79.10
RM-CABLE-40-1756TBCH		RELAY MODULE RIBBON CABLE 40 WAY IDC /1756-TBCH DOUBLE INSULATED - 1M	\$	195.20
RM-CABLE-40WAY-2M		RELAY MODULE RIBBON CABLE 40 WAY IDC TO FREE END - 3.0M	\$	63.40
RM-CABLE-40WAY-2M-AB	RELAY MODULE RIBBON CABLE 40 WAY IDC TO FREE END - 3.0M	\$	63.40	
RM-CABLE-40WAY-2M-DI	RELAY MODULE RIBBON CABLE 40 WAY IDC TO FREE END - 3.0M	\$	63.40	

## Relays with Force-Guided Contacts (for Safety Applications)





50.12-012-1000		RELAY FORCE GUIDED CONTACTS, PCB + SOCKET MOUNT, 2 CO 8A@250VAC, 12VDC	\$	29.70
50.12-012-5000		RELAY FORCE GUIDED CONTACTS, PCB + SOCKET MOUNT, 2 CO 8A@250VAC AU FLASH, 12VDC	\$	39.70
50.12-024-1000		RELAY FORCE GUIDED CONTACTS, PCB + SOCKET MOUNT, 2 CO 8A@250VAC, 24VDC	\$	29.70
50.12-024-5000		RELAY FORCE GUIDED CONTACTS, PCB+ SOCKET MOUNT, 2 CO 8A@250VAC AU FLASH, 24VDC	\$	39.70
50.14.9.012.4310		RELAY FORCE GUIDED CONTACTS, PCB MOUNT, 3 NO +1 NC 8A@250VAC, 12VDC	\$	108.00
50.14.9.024.4310		RELAY FORCE GUIDED CONTACTS, PCB MOUNT, 3 NO +1 NC 8A@250VAC, 24VDC	\$	108.00
50.16.9.024.5510	RELAY FORCE GUIDED CONTACTS, PCB MOUNT, 5 NO +1 NC 8A@250VAC, 24VDC	\$	138.70	
7S.12-230-5110		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 1NO+1NC 6A@250VAC, 230VAC COIL	\$	166.70
7S.14-024-0310		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 1NO+1NC 6A@250VAC, 230VAC COIL	\$	166.70
7S.14-024-4220		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 2NO+2NC 6A@250VAC, 24VDC COIL	\$	236.40
7S.14-230-4220		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 2NO+2NC 6A@250VAC, 230AC COIL	\$	324.30
7S.14-230-0220		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 2NO+2NC 6A@250VAC, 230VAC COIL	\$	358.30
7S.14-230-0310		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 2NO+2NC 6A@250VAC, 230VAC COIL	\$	358.30
7S.16-024-0420		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 3NO+1NC 6A@250VAC, 230VAC COIL	\$	324.30
7S.16-230-0420		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 4NO+2NC 6A@250VAC, 230VAC COIL	\$	368.30
22.44-024-4717		7S series	CONTACTOR 40A, 3 NO+1 NC AgSnO2, EN 60947-4-1 (Mirror Contact) 24VAC/DC COIL	\$
22.64-024-4717		CONTACTOR 63A, 3 NO+1 NC AgSnO2, EN 60947-4-1 (Mirror Contact) 24VAC/DC COIL	\$	247.00
R-SAFETY		SAFETY RELAY 2 CH 3 N/O + 1 N/C 4A@250VAC	\$	344.00

R- Safety



## Latching Relays and Contactors

Finder latching relays are available in a wide variety of voltages, functions and mounting options including DIN rail, surface and flush-box mount. They offer a pulse-ON/pulse-OFF (latching), or selectable latching/monostable (momentary) operation.

13.01-024		LATCHING OR MONOSTABLE RELAY, ELECTRONIC, 1 NO 16A, 24VAC/DC COIL	\$ 100.20
13.01-240		LATCHING OR MONOSTABLE RELAY, ELECTRONIC, 1 NO 16A, 230VAC COIL,	\$ 100.20
13.11-230		CALL RELAY WITH RESET COMMAND, 1 CO 12A, 230VAC COIL	\$ 133.80
13.12-012		CALL RELAY WITH RESET COMMAND, 1 CO+1 NO 12A, 12VAC/DC COIL	\$ 121.70
13.12-024		CALL RELAY WITH RESET COMMAND, 1 CO+1 NO 12A, 24VAC/DC COIL	\$ 121.70
13.61-230-AC		LATCHING RELAY, ELECTRONIC, 4 FUNCTION WITH RESET, 1 NO 16A, 230VAC COIL	\$ 120.90
13.81-230-AC		LATCHING RELAY, ELECTRONIC, 1 NO 10A, 230VAC COIL	\$ 110.20
13.91-230-AC	LATCHING AND TIMED RELAY, FLUSHBOX TYPE, ELECTRONIC, 1 NO10A, 230VAC COIL	\$ 102.90	
20.22-012-AC		LATCHING RELAY 2 NO 16A, 12VAC COIL	\$ 91.20
20.22-012-DC		LATCHING RELAY 2 NO 16A, 12VDC COIL	\$ 91.20
20.22-024-AC		LATCHING RELAY 2 NO 16A, 24VAC COIL	\$ 91.20
20.22-024-DC		LATCHING RELAY 2 NO 16A, 24VDC COIL	\$ 91.20
20.22-230-AC		LATCHING RELAY 2 NO 16A, 230VAC COIL	\$ 91.20
20.23-012-AC		LATCHING RELAY 1 NO+1 NC 16A, 12VAC COIL	\$ 91.20
20.23-012-DC		LATCHING RELAY 1 NO+1 NC 16A, 12VDC COIL	\$ 91.20
20.23-024-AC		LATCHING RELAY 1 NO+1 NC 16A, 24VAC COIL	\$ 91.20
20.23-024-DC		LATCHING RELAY 1 NO+1 NC 16A, 24VDC COIL	\$ 91.20
20.23-230-AC		LATCHING RELAY 1 NO+1 NC 16A, 230VAC COIL	\$ 91.20
26.02-012-AC		STEP RELAY, 2 NO 10A@250VAC, 12VAC COIL	\$ 69.60
26.02-024-AC		STEP RELAY, 2 NO 10A@250VAC, 24VAC COIL	\$ 69.60
26.02-230-AC		STEP RELAY, 2 NO 10A@250VAC, 230VAC COIL	\$ 69.60
26.03-012-AC		STEP RELAY, 1 NO+1 NC 10A@250VAC, 12VAC COIL	\$ 69.60
26.03-024-AC		STEP RELAY, 1 NO+1 NC 10A@250VAC, 24VAC COIL	\$ 69.60
26.03-230-AC		STEP RELAY, 1 NO+1 NC 10A@250VAC, 230VAC COIL	\$ 69.60
<b>Accessories</b>			
026.00		CAPACITOR MODULE FOR USE WITH ILLUMINATED PUSHBUTTONS	\$ 14.20
026.9-012		DC ADAPTOR 12VAC TO 12VDC FOR 26 SERIES RELAYS	\$ 33.20
026.9-024		DC ADAPTOR 24VAC TO 24VDC FOR 26 SERIES RELAYS	\$ 33.20
27.01-230-AC	27 series	LATCHING RELAY, FLUSHBOX TYPE, 1 NO 10A@250VAC, 230VAC COIL	\$ 66.60





## DIN Rail Mount Latching Contactors 2 and 4 Pole

A range of latching contactors with mechanical indication, 2 & 4 pole, in 25A, 40A and 63A versions. Designed for domestic, commercial or industrial control of lighting, heating, motors or any electrical load requiring a latching operation. All models may be used in latching or manual control mode

BI225-11-230VAC		BI-STABLE CONTACTOR 2P/25A 1xNO,NC 230V COIL	\$ 75.40
BI225-11-24VAC		BI-STABLE CONTACTOR 2P/25A 1xNO,NC 24VAC COIL	\$ 75.40
BI225-11-24VDC		BI-STABLE CONTACTOR 2P/25A 1xNO,NC 24VDC COIL	\$ 75.40
BI225-20-230VAC		BI-STABLE CONTACTOR 2P/25A 2xNO 230VAC COIL	\$ 75.40
BI225-20-24VAC		BI-STABLE CONTACTOR 2P/25A 2xNO 24VAC COIL	\$ 75.40
BI225-20-24VDC		BI-STABLE CONTACTOR 2P/25A 2xNO 24VDC COIL	\$ 75.40
BI240-11-230VAC		BI-STABLE CONTACTOR 2P/40A 1xNO,NC 230V COIL	\$ 125.60
BI240-11-24VAC		BI-STABLE CONTACTOR 2P/40A 1xNO,NC 24VAC COIL	\$ 125.60
BI240-20-230VAC		BI-STABLE CONTACTOR 2P/40A 2xNO 230VAC COIL	\$ 125.60
BI240-20-24VAC		BI-STABLE CONTACTOR 2P/40A 2xNO 24VAC COIL	\$ 125.60
BI263-11-230VAC		BI-STABLE CONTACTOR 2P/63A 1xNO,NC 230V COIL	\$ 197.00
BI263-11-24VAC		BI-STABLE CONTACTOR 2P/63A 1xNO,NC 24VAC COIL	\$ 197.00
BI263-20-230VAC		BI-STABLE CONTACTOR 2P/63A 2xNO 230VAC COIL	\$ 197.00
BI263-20-24VAC		BI-STABLE CONTACTOR 2P/63A 2xNO 24VAC COIL	\$ 197.00
BI425-22-230VAC		BI-STABLE CONTACTOR 4P/25A 2xNO,NC 230V COIL	\$ 108.40
BI425-22-24VAC		BI-STABLE CONTACTOR 4P/25A 2xNO,NC 24VAC COIL	\$ 108.40
BI425-22-24VDC		BI-STABLE CONTACTOR 4P/25A 2xNO,NC 24VDC COIL	\$ 108.40
BI425-40-230VAC		BI-STABLE CONTACTOR 4P/25A 4xNO 230VAC COIL	\$ 108.40
BI425-40-24VAC		BI-STABLE CONTACTOR 4P/25A 4xNO 24VAC COIL	\$ 108.40
BI440-22-230VAC		BI-STABLE CONTACTOR 4P/40A 2xNO,NC 230V COIL	\$ 185.10
BI440-22-24VAC		BI-STABLE CONTACTOR 4P/40A 2xNO,NC 24VAC COIL	\$ 185.10
BI440-40-230VAC		BI-STABLE CONTACTOR 4P/40A 4xNO 230VAC COIL	\$ 185.10
BI440-40-24VAC		BI-STABLE CONTACTOR 4P/40A 4xNO 24VAC COIL	\$ 185.10
BI463-22-230VAC		BI-STABLE CONTACTOR 4P/63A 2xNO,NC 230V COIL	\$ 205.00
BI463-22-24VAC		BI-STABLE CONTACTOR 4P/63A 2xNO,NC 24VAC COIL	\$ 205.00
BI463-40-230VAC		BI-STABLE CONTACTOR 4P/63A 4xNO 230VAC COIL	\$ 205.00
BI463-40-24VAC		BI-STABLE CONTACTOR 4P/63A 4xNO 24VAC COIL	\$ 205.00
BIC		CENTRAL CONTROL AUXILIARY MODULE	\$ 39.70
BIG	GROUP CONTROL AUXILIARY MODULE	\$ 39.70	
BIK	COMPENSATION CAPACITOR	\$ 39.70	
BIN-20	AUXILIARY CONTACT BLOCK 2xNO	\$ 39.70	


## DIN Rail Modular Contactors 2 and 4 pole, 25A, 40A & 63A

A range of contactors 17.7mm wide (2-pole) and 35mm wide (4-pole), with mechanical and LED indication as standard, continuously-rated coils and contacts, and optional auxiliary contacts. Contact options are AgNi contacts (specifically intended for resistive and slightly inductive loads and motor loads, or AgSnO2 contacts (specifically intended for lamp loads and for some high inrush current loads\*)

22.32-012-1340		CONTACTOR 25A, AUTO ON/OFF 2 NO AgNi, 12VAC/DC COIL	\$ 92.20
22.32-024-1320		CONTACTOR 25A, 2 NO AgNi, 24VAC/DC COIL	\$ 82.00
22.32-024-1420		CONTACTOR 25A, 2 NC AgNi, 24VAC/DC COIL	\$ 82.00
22.32-024-1520		CONTACTOR 25A, 1 NO+1NC AgNi, 24VAC/DC COIL	\$ 82.00
22.32-024-4320		CONTACTOR 25A, 2 NO AgSnO2, 24VAC/DC COIL	\$ 82.00
22.32-024-4340		CONTACTOR 25A, AUTO ON/OFF, 2 NO AgSnO2, 12VAC/DC COIL	\$ 92.20
22.32-024-4420		CONTACTOR 25A, 2 NC AgSnO2 24VAC/DC COIL	\$ 82.00
22.32-024-4520		CONTACTOR 25A NO, NC AgSnO2 24VAC/DC COIL	\$ 82.00
22.32-230-1320		CONTACTOR 25A, 2 NO AgNi 230VAC COIL	\$ 82.00
22.32-230-1420		CONTACTOR 25A, 2 N/C AgNi 230VAC COIL	\$ 82.00
22.32-230-1520		CONTACTOR 25A, 1NO+1 NC AgNi 230VAC COIL	\$ 82.00
22.32-230-4320		CONTACTOR 25A, 2 NO AgSnO2 230VAC COIL	\$ 82.00
22.32-230-4340		CONTACTOR 25A, AUTO/ON/OFF, 2 NO AgSnO2 230VAC COIL	\$ 92.20
22.32-230-4420		CONTACTOR 25A, 2 NC AgSnO2 230VAC COIL	\$ 82.00
22.32-230-4520		CONTACTOR 25A, 1NO+1NC AgSnO2, 230VAC COIL	\$ 82.00
			
	22.32		
22.34-024-1320		CONTACTOR 25A, 4 NO AgNi, 24VAC/DC COIL	\$ 116.10
22.34-024-1620		CONTACTOR 25A, 2 NO+2NC AgNi, 24VAC/DC COIL	\$ 116.10
22.34-024-4320		CONTACTOR 25A, 4 NO AgSnO2, 24VAC/DC COIL	\$ 116.10
22.34-024-4340		CONTACTOR 25A, AUTO/ON/OFF, 4 NO AgSnO2 24VAC/DC COIL	\$ 126.40
22.34-024-4620		CONTACTOR 25A, 2 NO+2NC AgSnO2 24VAC/DC COIL	\$ 116.10
22.34-024-4720		CONTACTOR 25A, 3 NO+1NC AgSnO2 24VAC/DC COIL	\$ 116.10
22.34-230-1320		CONTACTOR 25A, 4 NO AgNi 230VAC COIL	\$ 116.10
22.34-230-1620		CONTACTOR 25A, 2 NO+2 NC AgNi 230VAC COIL	\$ 116.10
22.34-230-4320		CONTACTOR 25A, 4 NO AgSnO2 230VAC	\$ 116.10
22.34-230-4340		CONTACTOR 25A, AUTO/ON/OFF, 4 NO AgSnO2 230VAC COIL	\$ 126.40
22.34-230-4620		CONTACTOR 25A, 2 NO+2 NC AgSnO2 230VAC COIL	\$ 116.10
			
	22.34		
22.44-024-4310		CONTACTOR 40A, 4 NO AgSnO2, 24VAC/DC COIL	\$ 237.80
22.44-024-4410		CONTACTOR 40A, 4 NC AgSnO2, 24VAC/DC COIL	\$ 185.10
22.44-024-4610		CONTACTOR 40A, 2 NO+2 NC AgSnO2, 24VAC/DC COIL	\$ 237.80
22.44-024-4710		CONTACTOR 40A, 3 NO+1 NC AgSnO2, 24VAC/DC COIL	\$ 237.80
22.44-120-4310		CONTACTOR 40A, 4 NO AgSnO2, 110-125VAC/DC COIL	\$ 237.80
22.44-230-4310		CONTACTOR 40A, 4 NO AgSnO2, 230VAC COIL	\$ 237.80
22.44-230-4410		CONTACTOR 40A, 4 NC AgSnO2, 230VAC COIL	\$ 185.10
22.44-230-4610		CONTACTOR 40A, 2 NO+2NC AgSnO2 230VAC COIL	\$ 237.80
22.44-230-4710		CONTACTOR 40A, 3 NO+1 NC AgSnO2 230VAC COIL	\$ 237.80
			
	22.44		
22.64-024-4310		CONTACTOR 63A, 4 NO AgSnO2 24VAC/DC COIL	\$ 262.70
22.64-024-4610		CONTACTOR 63A, 2 NO+ 2NC AgSnO2 24VAC/DC COIL	\$ 262.70
22.64-024-4710		CONTACTOR 63A, 3 NO+1 NC AgSnO2 24VAC/DC COIL	\$ 262.70
22.64-230-4310		CONTACTOR 63A, 4 NO AgSnO2 230VAC COIL	\$ 262.70
22.64-230-4610		CONTACTOR 63A, 2 NO+2 NC AgSnO2 230VAC COIL	\$ 262.70
22.64-230-4710		CONTACTOR 63A, 3 NO+1 NC AgSnO2 230VAC COIL	\$ 262.70
22.72-024-1410		CONTACTOR 32A, 2 NC AgNi, 24VAC/DC COIL	\$ 119.00
22.72-024-1410		CONTACTOR 32A, 2 NC AgNi, 24VAC/DC COIL	\$ 119.00
22.72-024-1510		CONTACTOR 32A, 1 NO+1 NC AgNi, 24VAC/DC COIL	\$ 119.00
22.72-024-1310		CONTACTOR 32A, 2 NO AgNi, 24VAC/DC COIL	\$ 99.80
22.72-024-1510		CONTACTOR 32A, 1 NO+1 NC AgNi, 24VAC/DC COIL	\$ 119.00
22.74-024-1410		CONTACTOR 32A, 4 NC AgNi, 24VAC/DC COIL	\$ 152.25
22.74-230-1410		CONTACTOR 32A, 4 NC AgNi, 230VAC COIL	\$ 152.25
			
	22.64		
IKA25-04-230V		CONTACTOR, DIN RAIL, 4P NC 25A AC1, 230VAC COIL	\$ 108.40
IKD25-04-24VAC/DC		CONTACTOR, DIN RAIL, 4P NC 25A AC1, 24VAC/DC COIL	\$ 108.40
IK40-04-230V		CONTACTOR, DIN RAIL, 4P NC 40A AC1, 230VAC COIL	\$ 158.60


## Solid State Relays

### DIN Rail Contactor Accessories

022.33-AUX-N/O		AUXILIARY CONTACT MODULE 2 NO FOR 22 SERIES CONTACTORS	\$ 65.80
022.35-AUX-N/O-N/C		AUXILIARY CONTACT MODULE 1 NO + 1 NC FOR 22 SERIES CONTACTORS	\$ 65.80
022.65-AUX-N/O-N/C		AUXILIARY CONTACT MODULE 1 NO + 1 NC FOR 22.44 AND 22.64 SERIES CONTACTORS	\$ 65.80
		CONTACTOR 32A, 1 NO+1 NC AgNi, 24VAC/DC COIL	\$ 119.00
022.18-BLACK	022.33	JUMPER LINK 8-WAY FOR 22.32 CONTACTORS	\$ 13.30
022.18-BLUE		JUMPER LINK 8-WAY FOR 22.32 CONTACTORS	\$ 13.30
022.18-RED		JUMPER LINK 8-WAY FOR 22.32 CONTACTORS	\$ 13.30
022.26-BLACK		JUMPER LINK 6-WAY FOR 22.34 CONTACTORS	\$ 13.30
022.26-BLUE		JUMPER LINK 6-WAY FOR 22.34 CONTACTORS	\$ 13.30
022.26-RED		JUMPER LINK 6-WAY FOR 22.34 CONTACTORS	\$ 13.30
020.01-ADAPTOR		DIN TO SURFACE MOUNT ADAPTOR	\$ 1.40
020.03		SEPARATOR FOR 20, 22 SERIES - 3mm	\$ 3.60

## Solid State Relays


### Finder 77 Series Hockey Puck Solid State Relays - Standard hockey puck size zero-crossing SSRs with terminal cover

77.25-024-8250		SSR DIN MOUNT WITH HEATSINK, ZERO CROSSING, 25A 230VAC LOAD, 24VDC CONTROL	\$ 112.40
77.25-024-8650		SSR DIN MOUNT WITH HEATSINK, ZERO CROSSING, 25A 600VAC LOAD, 24VDC CONTROL	\$ 130.90
77.25-230-8250		SSR DIN MOUNT WITH HEATSINK, ZERO CROSSING, 25A 230VAC LOAD, 230VAC CONTROL	\$ 117.70
77.25-230-8650		SSR DIN MOUNT WITH HEATSINK, ZERO CROSSING, 25A 600VAC LOAD, 230VAC CONTROL	\$ 145.40
77.45-024-8250		SSR HOCKEY PUCK, ZERO CROSSING 40A 230VAC LOAD 24VDC CONTROL	\$ 132.90
77.45-024-8650		SSR HOCKEY PUCK, ZERO CROSSING 40A 600VAC LOAD 24VDC CONTROL	\$ 155.50
77.45-230-8250		SSR HOCKEY PUCK, ZERO CROSSING 40A 230VAC LOAD 230VAC CONTROL	\$ 146.20
77.45-230-8650		SSR HOCKEY PUCK, ZERO CROSSING 40A 600VAC LOAD 230VAC CONTROL	\$ 172.80
77.55-024-8250		SSR HOCKEY PUCK, ZERO CROSSING 50A 230VAC LOAD 24VDC CONTROL	\$ 148.90
77.55-024-8650		SSR HOCKEY PUCK, ZERO CROSSING 50A 600VAC LOAD 24VDC CONTROL	\$ 172.80
77.55-230-8250		SSR HOCKEY PUCK, ZERO CROSSING 50A 230VAC LOAD 230VAC CONTROL	\$ 164.00
77.55-230-8650		SSR HOCKEY PUCK, ZERO CROSSING 50A 600VAC LOAD 230VAC CONTROL	\$ 191.60

### Autonics Hockey Puck Solid State Relays - LED indicator & safety cover, zero voltage turn-on

SR1-1250-N	SSR 1PH/50A 24-240VAC/4-30VDC CONTROL	\$ 141.50
SR1-4225-N	SSR 1PH/25A 24-240VAC/90-240VAC CONTROL	\$ 72.50

### Crouzet GN Series Hockey Puck Solid State Relays - LED indicator & safety cover, zero voltage turn-on

SSR10A-DC		SSR 10A 24-280VAC 4-32VDC CONTROL (84137000N)	\$ 99.80
SSR25A-DC		SSR 25A 24-280VAC 4-32VDC CONTROL (84137010N)	\$ 120.80
SSR50A-DC		SSR 50A 48-660VAC, 4-32VDC CONTROL (84137120N)	\$ 167.10
SSR75A-DC		SSR 75A 48-660VAC, 4-32VDC CONTROL (84137130N)	\$ 225.80
SSR100A-DC		SSR 100A 48-660VAC, 4-32VDC CONTROL (84137140N)	\$ 289.80
SSR125A-DC		SSR 125A 48-660VAC, 4-32VDC CONTROL (84137180N)	\$ 336.00
SSR25A-AC24		SSR 25A 48-660VAC18-36VAC/DC CONTROL (84137012N)	\$ 131.30
SSR50A-AC24		SSR 50A 48-660VAC18-36VAC/DC CONTROL (84137122N)	\$ 168.00
SSR75A-AC24		SSR 75A 280VAC LOAD, 18-36VAC CONTROL, ZERO CROSS (84137032)	\$ 325.20
GN Series			
SSR10A-AC	SSR 10A 20-265VAC, 20-265VAC CONTROL (84137001N)	\$ 110.30	
SSR25A-AC	SSR 25A 20-280VAC, 20-265VAC CONTROL (84137011N)	\$ 131.30	
SSR50A-AC	SSR 50A 48-660VAC, 20-265VAC CONTROL (84137121N)	\$ 193.50	
SSR75A-AC	SSR 75A 48-660VAC, 20-265VAC CONTROL (84137131N)	\$ 322.50	
SSR100A-AC	SSR 100A 48-660VAC, 20-265VAC CONTROL (84137141N)	\$ 303.50	
SSR125A-AC	SSR 125A 48-660VAC, 20-265VAC CONTROL (84137181N)	\$ 362.30	


### Hockey Puck DC-In, DC-Out Power Relays

MOSFET output, fast switching times, LED indicator

SSRGNAD10A-DC	SSR 10A 200VDC LOAD, 4-32VDC CONTROL 84137650N	\$ 188.00
SSRGNAD20A-DC	SSR 20A 100VDC LOAD, 4-32VDC CONTROL 84137660N	\$ 188.00
SSRGNAD40A-DC	SSR 40A 55VDC LOAD, 4-32VDC CONTROL 84137670N	\$ 188.00
SSRGNAD40DM	SSR 40A 5-60VDC LOAD, 4-32VDC CONTROL, 84137870N	\$ 215.30


### Heatsinks and accessories for Hockey Puck Solid State Relays

It is vital that correct mounting procedures, including appropriate heatsinks, are employed to ensure optimum performance to specification. Warranty may be voided if correct procedures are not followed -

HEATSK-077.25		HEATSINK, DIN MOUNT, 2 DEG C/W, FOR SSR UP TO 25A	\$ 126.90
HEATSK-077.55		HEATSINK, DIN MOUNT 0.9 DEG C/W, FOR SSR 40 & 50A	\$ 145.40
HEATSK-10A		HEATSINK, DIN MOUNT 2.2 DEG C/W FOR SSR 10A	\$ 78.80
HEATSK-25-50A		HEATSINK, DIN MOUNT 1.1deg C/W FOR SSR 25-50A	\$ 99.80
HEATSK-PASTE-150G		HEATSINK PASTE (150g TUBE)	\$ 63.50
HEATSK-PASTE		HEATSINK PASTE (10ml TUBE)	\$ 18.30
THERMAL PAD		CRYDOM THERMAL PAD FOR SSR	\$ 3.00
THERMAL PAD/3		CRYDOM THERMAL PAD FOR 3-POLE SSR	\$ 9.50
DRK1-ADAPTOR		SSR HEATSINK DIN RAIL ADAPTOR	\$ 27.10
HK1-HARDWARE-KIT		CRYDOM MOUNTING SCREWS FOR SSR	\$ 2.00

### Plug-in Din Rail Mount Solid State Relays

Miniature (12.6mm wide) SSR in industry standard plug-in package 5A switching, zero volt turn-on, built-in LED indicator

SRS1-A1205		SSR PLUG-IN. 5A 24-240VAC LOAD, 4-24VDC CONTROL	\$ 88.20
SRS1-A1D102		SSR PLUG-IN 2A 5-100VDC LOAD, 4-24VDC CONTROL	\$ 67.20

SK-G05		RELAY SOCKET FOR SRS1 SERIES PLUG-IN SSR	\$ 21.80
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SRS1

These relays can also be used in our locally manufactured Relay Modules

## Solid State Relays



### Finder 77 Series Modular Solid State Relays

DIN Rail mounting, zero-crossing SSR suitable for CFL and energy-saving lamps, solenoids, heater control, and contactor driver applications. Model 77.01 is 88.8mm high x 17.5mm wide x 60.8mm deep, models 77.11 & 77.31 have incorporated heatsink and measure 83.3mm high x 22.5mm wide x 120.3 deep

77.01-024		SSR DIN MOUNT, ZERO CROSSING, 5A 230VAC LOAD, 12-24VDC/24VAC CONTROL	\$ 136.40
77.01-230		SSR DIN MOUNT, ZERO CROSSING, 5A 230VAC LOAD, 230VAC CONTROL	\$ 136.40
77.11-024		SSR DIN MOUNT WITH HEATSINK, ZERO CROSSING 15A 230VAC LOAD, 24VDC CONTROL	\$ 158.80
77.11-230		SSR DIN MOUNT WITH HEATSINK, ZERO CROSSING 15A 230VAC LOAD, 230VAC CONTROL	\$ 158.80
77.31-024		SSR DIN MOUNT WITH HEATSINK, ZERO CROSSING, 30A 400VAC LOAD, 24VDC CONTROL	\$ 211.30
77.31-230	SSR DIN MOUNT WITH HEATSINK, ZERO CROSSING, 30A 400VAC LOAD, 230VAC CONTROL	\$ 211.30	

77.31

### Crouzet Din Rail Mount Relays with Integrated Heatsink – Single and Three Phase

GNR20DCZH		SSR 20A, INTEGRAL HEATSINK, DIN MOUNT, 48-660VAC LOAD, 4-32VDC CONTROL	\$ 204.80
GNR25ACZ		SSR 25A, 3 PHASE, 48-600VAC LOAD, 180-280VAC CONTROL	\$ 684.00
GNR30DCZH		SSR 30A, INTEGRAL HEATSINK, DIN MOUNT, 48-660VAC LOAD, 4-32VDC CONTROL	\$ 215.30
GNR45AHZ		SSR 45A, INTEGRAL HEATSINK, DIN MOUNT, 48-600VAC LOAD, 180-280VAC CONTROL	\$ 381.20
GNR45DCZP		SSR 45A, INTEGRAL HEATSINK, DIN MOUNT, 24-500VAC LOAD, 4-32VDC CONTROL	\$ 390.00
GN325DSZH		SSR 25A 3 PHASE, WITH HEATSINK, 24-510VAC LOAD, 4-32VDC CONTROL	\$ 695.00
GN350DSZH		SSR 50A 3 PHASE, WITH HEATSINK, 24-510VAC LOAD, 4-32VDC CONTROL	\$ 795.00



GNR Series



GN3 series

### Autonics Din Rail Mount Relays with Integrated Heatsink – Single and Three Phase

Zero volt turn-on, built-in LED indicator

SRH1-1430-N		SSR, INTEGRAL HEATSINK, DIN MOUNT, 1PH/30A 48-480VAC, 4-30VDC CONTROL	\$ 118.40
SRH1-1460-N		SSR, INTEGRAL HEATSINK, DIN MOUNT, 1PH/60A 48-480VAC/4-30VDC CONTROL	\$ 173.60
SRH1-2220-N		SSR, INTEGRAL HEATSINK, DIN MOUNT, 1PH/20A 24-240VAC/24VAC CONTROL	\$ 92.40
SRH1-2230-N		SSR, INTEGRAL HEATSINK, DIN MOUNT, 1PH/30A 24-240VAC/24VAC CONTROL	\$ 118.40
SRH1-2240-N		SSR, INTEGRAL HEATSINK, DIN MOUNT, 1PH/40A 24-240VAC/24VAC CONTROL	\$ 122.90
SRH1-2260-N		SSR, INTEGRAL HEATSINK, DIN MOUNT, 1PH/60A 24-240VAC/24VAC CONTROL	\$ 212.10
SRH3-1430		SSR, INTEGRAL HEATSINK, DIN MOUNT, 3PH/30A 48-480VAC/4-30VDC CONTROL	\$ 282.30
SRH3-1450		SSR, INTEGRAL HEATSINK, DIN MOUNT, 3PH/50A 48-480VAC/4-30VDC CONTROL	\$ 381.00
SRH3-1475		SSR, INTEGRAL HEATSINK, DIN MOUNT, 3PH/75A 48-480VAC/4-30VDC CONTROL	\$ 425.10
SRH3-2430		SSR, INTEGRAL HEATSINK, DIN MOUNT, 3PH/30A 48-480VAC/24VAC CONTROL	\$ 282.30
SRH3-2450	SSR, INTEGRAL HEATSINK, DIN MOUNT, 3PH/50A 48-480VAC/24VAC CONTROL	\$ 381.00	
SRH3-2475	SSR, INTEGRAL HEATSINK, DIN MOUNT, 3PH/75A 48-480VAC/24VAC CONTROL	\$ 425.10	
SRH3-4430		SSR, INTEGRAL HEATSINK, DIN MOUNT, 3PH/30A 48-480VAC/90-240VAC CONTROL	\$ 282.30
SRH3-4450		SSR, INTEGRAL HEATSINK, DIN MOUNT, 3PH/50A 48-480VAC/90-240VAC CONTROL	\$ 381.00
SRH3-4475		SSR, INTEGRAL HEATSINK, DIN MOUNT, 3PH/75A 48-480VAC/90-240VAC CONTROL	\$ 425.10

SH3R

Important Mounting Information for SSRs Any panel mount Solid State Relay must be mounted to a clean, bare (non-painted) surface that is free of oxidation. Heatsink recommendations made above are dependent on the ambient temperature and mounting position. Failure to provide adequate heatsinking will cause a solid state relay to fail, as they will thermally self destruct under load. Our heatsinks are BLACK ANODIZED to provide more efficient heat dissipation than clear or gold anodized units. The use of thermal transfer pads or thermal grease is a must to ensure maximum heat draw from the SSR to the heatsink. Since airflow will also affect its performance, a heatsink should be mounted in a manner that assures unrestricted airflow over its surface. Recommended mounting is on a vertical surface, with the fins oriented vertically, so that air may flow unimpeded along the surfaces of the heatsink. Horizontal or inverted mounting is possible but not recommended, and the SSR must be derated accordingly. All Solid State Relays are capable of running at full rated power with proper heatsinking. However, it is strongly suggested that they be used at no more than 80% power to provide a safety margin in case of higher than expected voltage, temperature, dirt on the heatsink, etc. Warrantys may be void if correct mounting procedures for SSRs are not followed...



## Timer Functions

Carrel-Electrade offers a wide array of timers for any process control application. Whatever the problem, we have your timing solution. The following is a description of the more commonly utilised timing relay functions available to assist in your selection process; some other specialist functions not described here are also available...

**Delay-ON (Type A, AI, O)** The timer is normally de-energised. When power is applied the timing process starts. At the end of the pre-determined time delay, the output relay energises. The output remains energised until power is removed from the timer

**One-shot/Interval with Control Signal (Type B, DE, H)** The timer is normally energised. The closing of the signal switch energises the output relay immediately. The output de-energises at the end of the pre-determined time delay. The timer operates once only, regardless of the number of times the signal switch is closed during the timing cycle. The signal switch input can be momentary or maintained

**Delay-OFF or Interval (Type DI, H)** The timer is normally de-energised. When power is applied the timing process starts and the output relay energises. The output is de-energised at the end of the pre-determined time delay. The power is removed to reset the timer for the next operation.

**Delay-OFF with control signal (Type C, BE)** The timer is normally energised. The closing of the signal switch energises the output relay immediately. Timing begins when the signal switch input is removed. The output relay de-energises at the end of the pre-determined time delay. If the signal switch is closed during the timing cycle, timing ends and begins again when it is removed.

**Symmetrical Recycling (Type D, Di, SW, 1, 2)** The timer is normally de-energised. When power is applied an "on/off" cycle begins. The "on" and "off" times are equal, and the cycle continues as long as power is applied. Type "D" begins with the "off" cycle, while type "Di" and type "SW" begin with the "on" cycle.

**Asymmetrical Recycling (Type L, Li)** The timer is normally de-energised. When power is applied an "on/off" cycle begins. The "on" and "off" times are set independently, and the cycle continues as long as power is applied. Type "L" begins with the "off" cycle, while type "Li" begins with the "on" cycle.

**Power-OFF Delay (Type BI, K)** Sometimes called True Delay-OFF, the timer is normally energised. The output relay energises immediately the power is applied, when power is removed the relay de-energises after the pre-determined time delay

**Star-Delta (Type Q, SD)** The timer is normally de-energised. When power is applied, and after the pre-determined time delay, the "star" contact opens. The "delta" contact closes after a small fixed time delay. The power is removed to reset the timer for the next operation

**Timed Step or Impulse Relay (Type IT)** The timer is normally energised. On the closing of the signal switch the output contacts transfer and remain so. After the opening of the signal switch the contact remain transferred for the duration of the preset delay. During the timing period it is possible to immediately transfer the output contacts with a further impulse on the signal switch. This is the function often used on spa pool timers

**Fixed Pulse Delayed (Type GI, 3)** The timer is normally de-energised. When power is applied the timing process starts. At the end of the pre-determined time delay, the output relay energises for a fixed time of 0.5secs and then resets

**Delay-ON with control signal (Type AE)** As type A above, but the timer is normally energised, and the timing process begins when a signal switch is applied.

**Delay-ON with control signal (Type AE)** As type A above, but the timer is normally energised, and the timing process begins when a signal switch is applied.

**Interval with control signal off (retriggerable - Type EEa)** The timer is normally energised. On the opening of the signal switch the output contacts transfer and remain so for the duration of the preset delay, after which they reset.

**Interval with control signal on and off (Type FE)** The timer is normally energised. Both the opening and closing of the signal switch initiates the transfer of the output contacts. In both instances the contacts reset after the preset delay has elapsed.

**Pulse Delayed with control signal on (Type GE)** The timer is normally energised. Closing the signal switch initiates the preset delay, after which the output contacts transfer. Reset occurs after a fixed time of 0.25s

**Watchdog (retriggerable interval with control signal on - Type WD)** The timer is normally energised. On the opening of the signal switch the output contacts transfer and remain so for the duration of the preset delay, after which they reset.; subsequent closures of the control signal restart the preset delay time. If the closure of the signal switch is longer than the preset time, the output contacts reset.

**Shower Function (off-delay with control signal and pause signal - Type SHp)** The timer is normally de-energised. Closing the signal switch immediately transfers the output contacts. Opening the signal switch initiates the preset delay, after which the output contacts reset. Closure of the pause switch will immediately halt the timing process and transfer the output contacts, but the elapsed time will be retained. on opening the pause switch, the contacts transfer again and timing resumes from the retained value

**Impulse on energising (3)** On application of the supply voltage, the output is instantly switched ON for the preset time duration (T) after which it is switched off.

**Accumulative Delay ON signal (4)** On application of the supply voltage, the preset timing duration commences. When the input signal is applied the timing pauses and resumes only when the output signal is removed. The output is switched ON at the end of the preset time duration.

**Accumulative Delay on Inverted signal (5)** On application of the supply voltage and input signal, the preset timing duration commences. When the signal is removed the timing is paused and resumed when the signal is reapplied. The OUTPUT is switched ON at the end of the preset time duration (T).

**Accumulative Impulse on Signal (6)** On application of the supply voltage the OUTPUT is switched ON and the preset timing duration commences. When the signal is applied the timing pauses and resumes when the signal is removed. The output is switched OFF at the end of the preset time duration (T).

**Signal ON Delay (7)** On application of the input signal, the preset time duration (T) starts. On completion of the preset time, the output is switched ON and remains ON until the input signal is present.

## Timer Functions

**Inverted Signal ON Delay (8)** On application of the supply voltage the preset time duration (T) starts. When the input signal is applied, the timing pauses and resumes only when the signal is removed. On completion of the preset time, the output is switched ON.

**Signal OFF Delay (E, 9)** On application of the supply voltage and input signal, the output is switched ON. When the signal is removed the preset time duration commences and the output is switched OFF at the end of the time duration.

**Impulse ON/OFF (A)** On application or removal of the input signal the output is switched ON and the preset time duration (T) starts. On completion of the preset time the output is switched ON. On removal of the input signal, the preset time period starts again and the output is switched ON when the preset time duration is complete

**Signal Off/On (b)** On application of input signal, the preset delay time period (T) starts. On completion of the preset time, the output is switched ON. On removal of input signal, the preset time period starts again and the output is switched ON when the preset time duration is complete.

**Leading Edge Impulse (C)** On application of input signal the output is immediately switched ON. The output remains ON for the preset time duration (T) after which it is switched OFF. If the input signal is removed during the preset time, the output remains unaffected.

**Leading Edge Impulse 2 (d)** On application of input signal the output is immediately switched ON. The output remains ON for the preset time duration (T) after which it is switched OFF. If the input signal is removed during the preset time, the output is immediately switched OFF

**Trailing Edge Impulse 1 (E)** When the input signal to the timer is removed, the output is immediately switched ON for the preset time duration (T) after which it is switched OFF. If the input signal is applied during the preset time, the output is immediately switched OFF.

**Trailing Edge Impulse 2 (F)** When the input signal to the timer is removed, the output is immediately switched ON for the preset time duration (T) after which it is switched OFF. If the input signal is applied during the preset time, the output remains unaffected.




**Delayed Impulse (G)** On application of input signal, the preset 'OFF' time duration (TOFF) starts. The output is switched ON at the end of the preset 'OFF' time duration & the preset 'ON' time duration commences irrespective of signal level and remains ON till the completion of 'T ON'.

**Inverted Signal On Delay type 2 (H)** Timing starts only upon signal 'S' transition high to low. During timing or after completion of Time (i.e. relay on), any signal transition is ignored. To reset the timer supply has to be interrupted



## Timers

### R-ELT Emergency Light Test Timer DIN Rail Mounted, 17.5mm wide

Emergency lighting test timer with remote-operate facility, designed to facilitate the testing procedures of emergency lighting systems, with selectable time intervals to carry out both the functional test and the full load duration test. The R-ELT is easy to operate from the front-face button or a remote push button to both activate the timing cycle and select the time interval. Time intervals are 60, 90 and 120 minutes standard, with other time ranges on request, as special versions. The R-ELT has a SPCO 10A AC1 (non-inductive) output relay contact

R-ELT-230V		EMERGENCY LIGHT TEST TIMER, 230Vac, STANDARD, 60, 90, 120 MINUTE RANGE	\$ 148.80
R-ELT-230V-30-60-90		EMERGENCY LIGHT TEST TIMER 230Vac, 30, 60, 90 MINUTE RANGES	\$ 151.50
R-ELT-SPECIAL		EMERGENCY LIGHT TEST TIMER 230VAC - NON STANDARD RANGE	\$ 163.70
R-ELT-230V-DIN		EMERGENCY LIGHT TEST TIMER 230VAC, MOUNTED ON DIN RAIL WITH 4P CONTACTOR	\$ 363.60
R-ELT-230V-DIN2		EMERGENCY LIGHT TEST TIMER 230VAC, MOUNTED ON DIN RAIL WITH 4P CONTACTOR	\$ 363.60
R-ELT-230V-CB1		EMERGENCY LIGHT TEST TIMER 230VAC, IN LOCKABLE ENCLOSURE WITH 4P CONTACTOR	\$ 522.20
R-ELT-230V-CB2		EMERGENCY LIGHT TEST TIMER 230VAC, IN LOCKABLE ENCLOSURE WITH 4P CONTACTOR	\$ 522.20

### Crouzet Chronos2 DIN Rail Timers

MAR1		DELAY-ON TIMER, 0.1s/100h,1CO10A@250VAC/DC, 24-240AC/24DC	\$ 164.20
MAS5		DELAY-ON TIMER, 0.1s/100h SOLID STATE 0.7A O/P, 24-240AC/24DC	\$ 164.20
MCR1		TIMER DELAY-OFF 0.1s/100h,1CO10A@250VAC/DC, 24-240AC/24VDC	\$ 164.20
MLR1		TIMER ASYMMETRICAL RECYCLE 0.1s/100h,1CO10A@250VAC/DC, 24-240AC/24DC	\$ 164.20
MUR3		TIMER MULTI FUNCTION, 0.1s/100h,1CO10A@250VAC/DC, 12-240VAC/DC	\$ 197.30
MXR1		TIMER, TIMED IMPULSE RELAY 0.1s/100h,1CO10A@250VAC/DC, 24-240AC/24DC	\$ 164.20
RQR1		TIMER, STAR-DELTA, 20-140ms, 8A@250VAC/DC, 24/240VAC	\$ 164.20
RQR6	MLR1	TIMER, STAR-DELTA, 20-140ms, 8A@250VAC/DC, 240/400VAC	\$ 243.20


### Finder DIN Rail Timers

FINDER 80 Series multifunction/multivoltage (12-240Vac/dc) DIN rail mounted timers, 17.5mm wide, timing ranges from 0.1s to 24h

80.01-12/240		TIMER MULTIFUNCTION, 0.1S-24h,1CO 16/30A@250/400VAC,12-240VAC/DC	\$ 165.30
80.61-240-AC		TIMER,TRUE POWER-OFF DELAY >3MIN,1CO 8/15A@250/400VAC, 24-240VAC/DC	\$ 198.30
80.71-24/240		TIMER MULTIFUNCTION, 0.1s - 24h, SSR/1A,12-240VAC/DC	\$ 197.00
80.82-240		TIMER, STAR-DELTA 0.05-1min, 2NO 6/10A@250/400VAC,12-240VAC/DC	\$ 198.30
80.91-12/240		TIMER, ASYMMETRICAL RECYCLING, 0.1s - 20h, 1CO 16/30A@250/400VAC,12-240VAC/DC	\$ 197.00

80.91


FINDER 83 Series multifunction/multivoltage (24-240Vac/dc) DIN rail mounted timers, 22.5mm wide, featuring 8 time scales offering a timing range from 0.05secs to 10 days, models with external potentiometer capability for ease of operator adjustment, and 2 timed or 1 timed + 1 instantaneous contact options

83.01-240		MULTI-FUNCTION TIMER, 1CO 16A@250VAC, 24-240VAC/DC	\$ 165.30
83.02-240		MULTI-FUNCTION TIMER, 2CO 16A@250VAC, 24-240VAC/DC, EXTERNAL POT	\$ 231.40
83.52-240		MULTI-FUNCTION TIMER, 2CO 16A@250VAC, 24-240VAC/DC, EXTERNAL POT	\$ 231.40
83.62-230		TIMER, TRUE POWER-OFF DELAY >3MIN, 2 CO, 24-240VAC/DC	\$ 231.40
087-POT		EXTERNAL R10K POT FOR 83.02/83.52 TIMER	\$ 233.10


087-POT

### Finder SMARTimer Digital Multifunction Timers, DIN Rail


FINDER 84 Series SMARTimer DIN rail mounted digital timers Programmable via smartphone with NFC communications or via front-panel joystick control. 2 in 1: two independent channels with 25 functions per channel, large backlit display, 0.1sec to 9999 hours

84.02-024		DIGITAL MULTIFUNCTION TIMER, NFC, 12-24VAC/DC, 2 INDEPENDENT CHANNELS	\$ 307.30
84.02-240		DIGITAL MULTIFUNCTION TIMER, NFC, 110-240VAC/DC, 2 INDEPENDENT CHANNELS	\$ 307.30
83.52-240		MULTI-FUNCTION TIMER, 2CO 16A@250VAC, 24-240VAC/DC, EXTERNAL POT	\$ 231.40
83.62-230		TIMER, TRUE POWER-OFF DELAY >3MIN, 2 CO, 24-240VAC/DC	\$ 231.40
087-POT		EXTERNAL R10K POT FOR 83.02/83.52 TIMER	\$ 233.10


84.02

86.00-240		MULTIFUNCTION TIMER MODULE, 12-240VAC/DC, USE WITH 90.02, 90.03, 96.04 SOCKETS	\$ 111.00
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### Finder Plug-in Timers

85.02-012		MULTIFUNCTION TIMER, 2CO 10A/250VAC, 12VAC/DC, PLUG-IN	\$ 131.10
85.02-024		MULTIFUNCTION TIMER, 2CO 10A/250VAC, 24VAC/DC, PLUG-IN	\$ 131.10
85.02-110		MULTIFUNCTION TIMER, 2CO 10A/250VAC, 110VAC/DC, PLUG-IN	\$ 131.10
85.02-240		MULTIFUNCTION TIMER, 2CO 10A/250VAC, 240VAC, PLUG-IN	\$ 131.10
85.04-110		TIMER 110VAC/DC 4CO 7A/250VAC, 230VAC *NON-STK*	\$ 130.90
85.04-240		TIMER 240VAC/DC 4CO 7A/250VAC, 230VAC *NON-STK*	\$ 130.90


88.92

88.02-24/230		TIMER, MULTIFUNCTION ANALOG, 48x48mm, 2CO 8A@250VAC, 24-240VAC/DC 11 PIN PLUG-IN	\$ 264.30
88.12-24/230		TIMER, MULTIFUNCTION ANALOG, 48x48mm, 2CO 8A@250VAC, 24-240VAC/DC 8 PIN PLUG-IN	\$ 264.30
88.92-12/240		TIMER ASYMMETRICAL RECYCLING, 48x48mm, 2CO 8A@250VAC,12-240VAC/DC 8 PIN PLUG-IN	\$ 370.60
BASE90-02		BASE, 8 PIN, SOLDER TERMINALS FOR 60.12 RELAYS	\$ 16.60
BASE90-03		BASE, DIN RAIL,11-PIN FOR 60.13 RELAYS AND 86.00 TIMER	\$ 16.60

85.02

## Timers


### Digicon DIN-rail Mounted Digital Timer - 8 or 18 non signal and signal based functions 17.5mm wide

DIGICON-V0DDTS		DIGITAL TIMER 8 FUNCTIONS MULTI-VOLTAGE 0730GR1	\$ 130.90
DIGICON-V0DDTS1		DIGITAL TIMER 18 FUNCTIONS MULTI-VOLTAGE	\$ 141.80

Digicon

### Autonics AT Series Timers (48x48mm), Plug-in

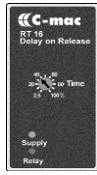
48 x 48mm Multi-Function, Multi-Range (0.05sec to 100hrs), plug-in. Timed and instantaneous contacts depending on mode

AT8N		TIMER MULTIRANGE 100-240VAC/24-240VDC, 8 PIN PLUG-IN	\$ 126.90
AT11DN		TIMER MULTIRANGE 100-240VAC/24-240VDC, 11 PIN PLUG-IN	\$ 142.80
BASE90-20		BASE, DIN RAIL 8 PIN FOR 60.12 RELAYS	\$ 16.60
BASE90-21		BASE, DIN RAIL 11 PIN FOR 60.13 RELAYS	\$ 16.60

AT8DN

### Comadan RT10, RT12, RT14, RT16 Timer Relays, 11 Pin Plug-In


Fixed time-range timers; please specify time range required when ordering

RT10-1-1-230-15S		TIMER, DELAY ON OPERATE, 15 SEC RANGE, 230VAC, 11 PIN PLUG-IN	\$ 202.30
RT10-2-1-115		TIMER, DELAY ON OPERATE, 115VAC, 11 PIN PLUG-IN	\$ 202.30
RT10-2-1-230		TIMER, DELAY ON OPERATE, 230VAC, 11 PIN PLUG-IN	\$ 202.30
RT10-2-2-024		TIMER, DELAY ON OPERATE, 24VAC/DC, 11 PIN PLUG-IN	\$ 232.60
RT10-NON-STK		TIMER, DELAY ON OPERATE, NON-STANDARD RANGE, 11 PIN PLUG-IN	\$ 235.30
RT12-2-1-115		TIMER, INTERVAL, 115VAC, 11 PIN PLUG-IN	\$ 202.30
RT12-2-1-230		TIMER, INTERVAL, 230VAC, 11 PIN PLUG-IN	\$ 202.30
RT12-2-1-230-10M		TIMER, INTERVAL, 10 MIN RANGE, 230VAC, 11 PIN PLUG-IN	\$ 202.30
RT12-2-2-024		TIMER, INTERVAL, 24VAC/DC, 11 PIN PLUG-IN	\$ 232.60
RT12-NON-STK		TIMER, INTERVAL, NON STANDARD RANGE, 11 PIN PLUG-IN	\$ 235.30
RT14-2-1-115		TIMER, SYMMETRICAL RECYCLE, 115VAC, 11 PIN PLUG-IN	\$ 205.00
RT14-2-1-230		TIMER, SYMMETRICAL RECYCLE, 230VAC, 11 PIN PLUG-IN	\$ 205.00
RT14-2-2-024		TIMER, SYMMETRICAL RECYCLE, 24VAC/DC, 11 PIN PLUG-IN	\$ 235.30
RT14-NON-STK		TIMER, SYMMETRICAL RECYCLE, NON STANDARD RANGE, 11 PIN PLUG-IN	\$ 237.90
RT16-2-1-115		TIMER, DELAY ON RELEASE, 0-60S, 115VAC, 11 PIN PLUG-IN	\$ 226.10
RT16-2-1-230		TIMER, DELAY ON RELEASE, 0-60S, 230VAC, 11 PIN PLUG-IN	\$ 226.10
RT16-2-2-024	TIMER, DELAY ON RELEASE, 0-60S, 24VAC/DC, 11 PIN PLUG-IN	\$ 256.40	

RT16

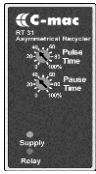
### Comadan RT20 - Multifunction Timer Relay, 11 Pin Plug-In

Delay on operate, Delay on release, Interval and Symmetrical recycle. 4 time ranges (0.4 sec - 64 min), 1 x 8A C/O contact

RT20-2-1-024-M1		TIMER, MULTIFUNCTION, 0.06S-640S, 24VAC/DC, 11 PIN PLUG-IN	\$ 267.00
RT20-2-1-024-M2		TIMER, MULTIFUNCTION, 0.4S-64MIN, 24VAC/DC, 11 PIN PLUG-IN	\$ 267.00
RT20-2-1-115-M2		TIMER, MULTIFUNCTION, 0.4S-64MIN, 115VAC, 11 PIN PLUG-IN	\$ 236.70
RT20-2-1-230-M2		TIMER, MULTIFUNCTION, 0.4S-64MIN 230VAC, 11 PIN PLUG-IN	\$ 236.70
RT20-NON-STK		TIMER, MULTIFUNCTION, NON STANDARD RANGE, 11 PIN PLUG-IN	\$ 269.70

RT20


### Comadan RT31 - Asymmetrical Recycler Timer Relay, 11 Pin Plug-In

RT31-2-1-115-M2		ASYMMETRICAL RECYCLING TIMER, 1 CO 8A@250VAC, 115VAC, 11 PIN PLUG-IN	\$ 288.20
RT31-2-1-230-M2		ASYMMETRICAL RECYCLING TIMER, 1 CO 8A@250VAC, 230VAC, 11 PIN PLUG-IN	\$ 288.20
RT31-2-2-024-M2		ASYMMETRICAL RECYCLING TIMER, 2 CO 5A@250VAC, 24VAC/DC, 11 PIN PLUG-IN	\$ 318.60
RT31-NON-STK		ASYMMETRICAL RECYCLING TIMER - NON STANDARD RANGE, 11 PIN PLUG-IN	\$ 321.30

RT31


### Comadan RT40 - Pulse Continuity Timer Relay, 11 Pin Plug-In

Accepts pulses from NPN/PNP or NAMUR sensors. Ideal for detecting conveyor belt breakages or flywheel and fanblade stoppages. 4 time range from 0.4sec - 64 min, 1 x 8A C/O

RT40-1-1-024-M2		PULSE CONTINUITY RELAY, NAMUR, NPN/PNP, CONTACT INPUT, 1 CO, 24VAC, 11 PIN	\$ 288.20
RT40-1-1-115-M2		PULSE CONTINUITY RELAY, NAMUR, NPN/PNP, CONTACT INPUT, 1 CO, 115VAC, 11 PIN	\$ 257.80
RT40-1-1-230-M2		PULSE CONTINUITY RELAY, NAMUR, NPN/PNP, CONTACT INPUT, 1 CO, 230VAC, 11 PIN	\$ 257.80
RT40-1-2-024-M2		PULSE CONTINUITY RELAY, NAMUR, NPN/PNP, CONTACT INPUT, 2 CO, 24VAC/DC, 11 PIN	\$ 288.20
RT40-NON-STK		PULSE CONTINUITY RELAY, NON STANDARD, NAMUR, NPN/PNP, CONTACT INPUT, 11 PIN	\$ 290.80

RT40

### Accessories for Comadan Timer Relays


ZB11		RELAY BASE, 11 PIN, DIN RAIL MOUNT, 400VAC RATED	\$ 21.10
CMAC-SPRING CLIP		RELAY RETAINING SPRING CLIP FOR ZB11 RELAY BASE	\$ 4.00
CMAC-DC-SUPPLY-12		DC POWER SUPPLY, 12-50VDC, FOR COMADAN RELAYS	\$ 189.10
CMAC-DC-SUPPLY-48		DC POWER SUPPLY, 85-370VDC, FOR COMADAN RELAYS	\$ 310.70

ZB11

## Counter-Timer & Time Switches



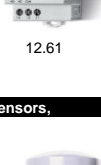

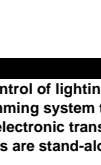
### Autonics Digital CT6 Counter-Timer Range

A very versatile Counter/Timer for production control applications such as length measurement, volume or quantity. Functions include a Timer to 9999.99s and 9999h 59m. Count up/down or bi-directional (10kcps), batch counting. Onboard pre-scaler and sensor supply (12Vdc). Takes NPN,PNP or contact input. Output 1 x SPST relay, 1 x SPDT relay (2A @ 250Vac) plus 3x isolated NPN open collector outputs rated 100mA @30Vdc

CT6M-1P2		TIMER COUNTER 72x72mm , 1 PRE-SET, 24VAC, 24-48VDC	\$ 372.80
CT6M-2P4		TIMER/COUNTER 72x72mm, 2 PRE-SET, 110-240VAC	\$ 372.80
CT6S-1P4		TIMER COUNTER 48x48mm,1 PRESET,110-240VAC	\$ 372.80
CT6Y-1P2		TIMER COUNTER 72x36mm 24VAC, 24-48VDC	\$ 372.80
CT6Y-1P4T		TIMER COUNTER 72x36mm 100-240VAC - MODBUS COMMS	\$ 445.50


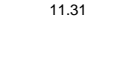
### Time Switches

FINDER Time Switches Din Rail Mount, SP C/O Contacts, 16A

12.01-230-AC		TIMESWITCH, ANALOG, 24 HOUR, 30min SET INTERVAL,1CO16A@250VAC, 230VAC	\$ 221.60
12.11-230-AC		TIMESWITCH, ANALOG, 24 HOUR, 15min SET INTERVAL,1CO16A@250VAC, 230VAC	\$ 207.60
12.21-230-AC		TIMESWITCH, DIGITAL, 7 DAY, 1 MIN SET INTERVAL,1CO16A@250VAC, 230VAC	\$ 296.80
12.21-24		TIMESWITCH, DIGITAL, 7 DAY, 1 MIN SET INTERVAL,1CO16A@250VAC, 230VAC	\$ 296.80
12.22-12/24		TIMESWITCH, DIGITAL, 7 DAY, 1 MIN SET INTERVAL,1CO16A@250VAC, 24VAC/DC	\$ 318.20
12.22-230-AC		TIMESWITCH, DIGITAL, 7 DAY, 1 MIN SET INTERVAL, 2CO16A@250VAC, 230VAC	\$ 342.50
12.51-230-AC	12.01	TIMESWITCH, DIGITAL, 24 HR/7 DAY, 30 MIN SET INTERVAL,1CO16A@250VAC, 230VAC	\$ 224.90
12.61-12/24		TIMESWITCH, DIGITAL, 7 DAY, NFC,1 MIN SET INTERVAL,1CO16A@250VAC,12-24VAC/DC	\$ 321.00
12.61-230		TIMESWITCH, DIGITAL, 7 DAY, 1 MIN SET INTERVAL,1CO16A@250VAC,110-230VAC/DC	\$ 289.60
12.62-230		TIMESWITCH, DIGITAL, 7 DAY, 1 MIN SET INTERVAL, 2CO16A@250VAC,110-230VAC/DC	\$ 346.20
12.71-024		TIMESWITCH, DIGITAL, 7 DAY, 1 MIN SET INTERVAL,1CO16A@250VAC, 24VAC/DC	\$ 293.60
12.71-230-AC		TIMESWITCH, DIGITAL, 7 DAY, 1 MIN SET INTERVAL,1CO16A@250VAC, 230VAC	\$ 275.80
12.81-230-AC	12.61	TIMESWITCH, DIGITAL, ASTRONOMIC, NFC, 24 HOUR,1CO16A@250VAC, 230VAC	\$ 270.70
12.A1-230-AC		TIMESWITCH, DIGITAL, ASTRONOMIC, 7 DAY,1CO16A@250VAC,110-230VAC	\$ 314.70
12.B1-230-AC		TIMESWITCH, DIGITAL, ASTRONOMIC, 7 DAY, 2CO16A@250VAC, 24VAC/DC	\$ 378.00



### Daylight Switches, Dimmers, PIR Sensors,

FINDER Daylight Switches


10.41-230-AC		DAYLIGHT SWITCH, 1 NO 16A@250VAC	\$ 133.30
10.61-230-AC		DAYLIGHT SWITCH 80mm DIA/18mm MOUNT, 1 NO 16A@250VAC	\$ 133.30
11.31-024		DAYLIGHT SWITCH, ADJUSTABLE 1-100 LUX, 1 NO 16A@250VAC, 12-24VAC	\$ 171.90
11.31-230		DAYLIGHT SWITCH, ADJUSTABLE 1-100 LUX, 1 NO 16A@250VAC,230VAC	\$ 132.80
11.31-230-03		DAYLIGHT SWITCH, ADJUSTABLE 1-100 LUX, 1 NO 16A@250VAC, 230VAC, WITH 11.03 HEAD	\$ 171.90
11.41-230		DAYLIGHT SWITCH, 1 CHANNEL, 1 NO 12A@250VAC,	\$ 213.40
11.42-230		DAYLIGHT SWITCH, 2 CHANNEL, 1-80 LUX, 20-1000 LUX, 1 NO 12A@250VAC, 230VAC	\$ 257.90
11.91-230	11.31	DAYLIGHT + DAILY TIME SWITCH, 230VAC	\$ 319.30
11.02-HEAD		DAYLIGHT SWITCH SENSOR HEAD, FOR 11.31, 41, 42 AND 91 RELAYS	\$ 33.60
11.03-HEAD		DAYLIGHT SWITCH FLUSH SENSOR HEAD 11.31/42 SERIES	\$ 60.40

### FINDER Lighting Dimmers

Electronic step relay/dimmer for control of lighting levels via a short pulse, or ramped up or down using a longer pulse, both leading and trailing edge operation. The 15.10/15.11 system employs a master/slave dimming system to provide proportional control of multiple lamps of multiple types in the same circuit, and is suitable for halogen lamps, dimmable LED lamps, dimmable CFL lamps, electronic transformers and electromagnetic transformers to a maximum 32 units, operated by up to 15 illuminated pushbuttons for complete control. The balance of the 15 series are stand-alone units for single circuit control.

15.10-230		MASTER DIMMER, 100W, 230VAC/ 0-10V OUTPUT	\$ 181.60
15.11-230		SLAVE DIMMER, 400W, 230VAC/ 0-10V INPUT	\$ 225.10
15.51-230		ELECTRONIC STEP RELAY- DIMMER, 230VAC	\$ 119.50
15.81-230		DIMMER, 500W, 230VAC 45-65HZ FOR LED LAMPS	\$ 158.70
15.91-230	15.11	ELECTRONIC DIMMER, 50W, LED LAMPS, 230VAC	\$ 119.50

### FINDER Passive Infra-Red Movement Detector

18.01-230-AC		PIR MOVEMENT SENSOR, INTERNAL INSTALLATION, SURFACE MOUNT, 1 NO 10A@250VAC	\$ 116.20
18.11-230-AC		PIR MOVEMENT SENSOR, EXTERNAL INSTALLATION IP54, SURFACE MOUNT, 1 NO 10A@250VAC	\$ 137.30
18.21-230-AC		PIR MOVEMENT SENSOR, CEILING MOUNTED,1NO 10A@250VAC	\$ 177.40
18.31-230-AC		PIR MOVEMENT SENSOR, RECESSED MOUNT, 1CO 10A@ 250VAC	\$ 177.40
18.31-230-HI-BAY		PIR MOVEMENT SENSOR, HI-BAY APPLICATIONS TO 6M, 1NO 10A@250VAC	\$ 195.20



## Pushbuttons & Indicators

### Panel Mount Indicators and Rocker Switches

MKA1	RED LED 9mm Ø, 6.3mm QC, FLAT LENS, 230VAC	\$ 6.40
MKA2	GREEN LED 9mm Ø, 6.3mm QC, FLAT LENS, 230VAC	\$ 7.40
MKA3	AMBER LED 9mm Ø, 6.3mm QC, FLAT LENS, 230VAC	\$ 6.40
MKA4	RED LED 12mm Ø, 6.3mm QC, LENS, 230VAC	\$ 7.40
MKA5	GREEN LED 12mm Ø, 6.3mm QC, LENS, 230VAC	\$ 9.10
MKA6	AMBER LED 12mm Ø, 6.3mm QC, LENS, 230VAC	\$ 7.40
MKB1	RED LED 9mm Ø, WITH LEADS, FLAT LENS, 230VAC	\$ 6.40
MKB2	GREEN LED 9mm Ø, WITH LEADS, FLAT LENS, 230VAC	\$ 7.40
MKB3	AMBER LED 9mm Ø, WITH LEADS, FLAT LENS, 230VAC	\$ 6.40
MKB4	RED NEON 9mm Ø FLAT SQUARE LENS WITH LEADS, 230VAC	\$ 6.40
MKB5	GREEN NEON 9mm Ø FLAT SQUARE LENS WITH LEADS, 230VAC	\$ 7.40
MKB6	AMBER NEON 9mm Ø FLAT SQUARE LENS WITH LEADS, 230VAC	\$ 6.40
MKC1	RED NEON 12mm Ø, FLAT LENS WITH LEADS, 230VAC	\$ 7.40
MKC2	GREEN NEON 12mm Ø, FLAT LENS WITH LEADS, 230VAC	\$ 9.10
MKC3	AMBER NEON 12mm Ø, FLAT LENS WITH LEADS, 230VAC	\$ 7.40
MKC4	RED NEON 12mm Ø ROUND CONICAL LENS, 230VAC	\$ 7.40
MKC5	GREEN NEON 12mm Ø ROUND CONICAL LENS, 230VAC	\$ 9.10
MKC6	AMBER NEON 12mm Ø ROUND CONICAL LENS, 230VAC	\$ 7.40
MKD1	RED NEON SEPARATE 12mm Ø LENS, 230VAC	\$ 7.40
MKD2	RED NEON SEPARATE 6mm Ø LENS, 230VAC	\$ 9.10
MKD3	RED-BLACK NEON 11x30mm 230VAC	\$ 9.10
MKD4	AMBER-BLACK NEON 11x30mm 230VAC	\$ 10.80
MKD5	RED-BLACK NEON 6mm Ø LENS, 230VAC	\$ 16.20
MKE1	RED-WHITE ROCKER SWITCH, 30x12mm,16A SPST, 230VAC	\$ 13.10
MKE2	RED-BROWN ROCKER SWITCH, 30x12mm,16A SPST, 230VAC	\$ 13.10
MKE3	RED-BLACK ROCKER SWITCH, 30x12mm,16A SPST, 230VAC	\$ 13.10
MKE4	AMBER-BLACK ROCKER SWITCH, 30x12mm,16A SPST, 230VAC	\$ 13.10
MKE5	RED-BLACK ROCKER SWITCH, O/I MARKING, 30x12mm, 16A SPST, 230VAC	\$ 13.10
MKE6	GREEN-BLACK ROCKER SWITCH, O/I MARKING, 30x12mm, 16A SPST, 230VAC	\$ 13.10
MKE7	BLK ROCKER SW 16A ON/OFF/ON 'I/O/I' (30 X 12 )	\$ 13.10
MKE8	BLK/BLK ROCKER SW 240 SPST (30 X 12 )	\$ 13.10
MKF1	WH/WH ROCKER SW 240V 16A SPDT VOGUE STYL	\$ 9.60
MKF2	BROWN-BROWN ROCKER SWITCH,16A SPST, 230VAC	\$ 9.60
MKF3	WHITE-WHITE ROCKER SWITCH,16A SPST, 230VAC	\$ 9.60
MKF4	BLK/WH ROCKER SW 250VAC 16A NON ILLUM	\$ 9.60
MKF5	BLACK-BLACK ROCKER SWITCH,16A SPST, 230VAC	\$ 13.10
MKF6	BLK/BLK BIASED ROCKER SW 81 SERIES 16A	\$ 13.10
MKG2	RED ROCKER SW 240VAC 16A DPDT LED EFFECT	\$ 13.20
MKG4	RED-BLACK ROCKER SWITCH, O/I MARKING, 30x25mm,16A DPST, 230VAC	\$ 13.20
MKG5	GREEN-BLACK ROCKER SWITCH, O/I MARKING, 30x25mm,16A DPST, 230VAC	\$ 13.20
MKG6	BLK/BLK ROCKER SW 250V 16A DPST 'I O'	\$ 13.20
MKG7	BLK/BLK ROCKER SW 240V DPDT	\$ 20.80
MKH1	RED-BLACK ROCKER SWITCH,SPLASH PROOF,16A SPST, 230VAC	\$ 20.80
MKH2	BLACK-BLACK PUSHBUTTON SWITCH,16A SPST, 230VAC	\$ 20.80
MKH3	BLK/RED ROCKER SW 240VAC 16A 2XSPST LED	\$ 19.30
MKJ1	WHITE 2xSPST ROCKER SW BLK BODY 240V	\$ 23.20
MKZ2	BLK/BLK CENTER OFF ROCKER 250VAC	\$ 9.10



## Pushbuttons & Indicators

### Rafi Momentary ( Impulse) Pushbuttons

1010010-01B	PUSHBUTTON 15mm, MOMENTARY,1NO 0.7A@ 250VAC, BLACK,	\$ 16.10
1010010-01G	PUSHBUTTON 15mm, MOMENTARY,1NO 0.7A@ 250VAC, GREEN	\$ 16.10
1100010-01R	PUSHBUTTON 15mm, MOMENTARY, 1NO 0.7A@250VAC, RED	\$ 16.10
1100011-51R	PUSHBUTTON 15mm, MOMENTARY, 1NC 0.7A@250VAC, RED	\$ 16.10
1101020-01B	PUSHBUTTON 16mm, MOMENTARY, 1NO 2A@250VAC, BLACK	\$ 29.60
1101020-01G	PUSHBUTTON 16mm, MOMENTARY, 1NO 2A@250VAC, GREEN	\$ 29.60
1101020-01R	PUSHBUTTON 16mm, MOMENTARY, 1NO 2A@250VAC, RED,	\$ 29.60
1101020-11B	PUSHBUTTON 16mm, MOMENTARY, 1NO 2A@250VAC, BLACK	\$ 29.60
1101020-11G	PUSHBUTTON 16mm, MOMENTARY, 1NC 2A@250VAC, GREEN	\$ 29.60
1101020-11R	PUSHBUTTON 16mm, MOMENTARY, 1NC 2A@250VAC, RED	\$ 29.60
1011020-01B	PUSHBUTTON 18mm, MOMENTARY, 2NO 2A@ 250VAC, BLACK	\$ 34.00
1011020-11B	PUSHBUTTON 18mm, MOMENTARY,1NO+1NC 2A@ 250VAC, BLACK	\$ 34.00
1011020-11G	PUSHBUTTON 18mm, MOMENTARY,1NO+1NC 2A@ 250VAC, GREEN	\$ 34.00
1011020-11R	PUSHBUTTON 18mm, MOMENTARY,1NO+1NC 2A@ 250VAC, RED	\$ 34.00
1013010-01R	PUSHBUTTON 25mm, MOMENTARY,1NO 2.0A@ 250VAC,RED	\$ 62.20
1013010-11R	PUSHBUTTON 25mm, MOMENTARY,1NC 2.0A@ 250VAC, RED	\$ 62.20
1101023-21	PUSHBUTTON 30mm, MOMENTARY, 1NO 2A@250VAC, RED	\$ 29.60
1101023-31	PUSHBUTTON 15mm, MOMENTARY, 1NC 2A@250VAC, RED	\$ 29.60
1011020-SPANNER	SPANNER,18mm, FOR 1011020 SERIES PUSHBUTTON	\$ 25.30
5520080-65C	CLEAR CAP RAFI 18mm PUSHBUTTON IP65 (1011020)	\$ 9.50
5520081-15	CLEAR CAP 15+16mm RAFI PUSHBUTTON IP65 (101001)	\$ 6.30
5520080-61B	BLACK CAP RAFI 18mm PUSHBUTTON IP65	\$ 6.30
5520080-61R	RED CAP RAFI 18mm PUSHBUTTON IP65	\$ 6.30



Red and Black caps are obsolete but available while stock lasts

### Pushbuttons & Indicators

#### Solid State Piezo-electric Pushbuttons

SMA1-A-AW-1B	PIEZO PUSHBUTTON 22mm, ALUMINIUM, MOMENTARY PULSE, 24VAC/DC 1NO, 0.2A , BLACK	\$ 102.10
SMA1-A-AW-1G	PIEZO PUSHBUTTON 22mm, ALUMINIUM, MOMENTARY PULSE, 24VAC/DC 1NO, 0.2A , GREEN	\$ 102.10
SMA1-A-AW-1L	PIEZO PUSHBUTTON 22mm, ALUMINIUM, MOMENTARY PULSE, 24VAC/DC 1NO, 0.2A , BLUE	\$ 102.10
SMA1-A-AW-1R	PIEZO PUSHBUTTON 22mm, ALUMINIUM, MOMENTARY PULSE, 24VAC/DC 1NO, 0.2A , RED	\$ 102.10
SMA1-B-EW-1G	PIEZO PUSHBUTTON 22mm, ALUMINIUM, MOMENTARY PULSE, 24VAC/DC 1NC, 0.2A , GREEN	\$ 102.10
SMA1-B-EW-1R	PIEZO PUSHBUTTON 22mm, ALUMINIUM, MOMENTARY PULSE, 24VAC/DC 1NC, 0.2A , RED	\$ 102.10
SMF1-A-AW-1B	PIEZO PUSHBUTTON 22mm, ALUMINIUM, MOMENTARY PULSE, 24VAC/DC 1NO, 0.2A, BLACK	\$ 72.00
SMF6-A-AW-1B	PIEZO PUSHBUTTON 16mm, ALUMINIUM, MOMENTARY PULSE, 24VAC/DC 1NO, 0.2A , BLACK	\$ 72.00



SMA1

#### Illuminated Piezo-electric Pushbuttons

SBR11-ABC-824-1N	PIEZO PUSHBUTTON 22mm, ALUMINIUM, MOMENTARY PULSE, 24VAC/DC 1NO, RED-GREEN-BLUE	\$ 195.90
SBR11-ABC-824-2N	PIEZO PUSHBUTTON 22mm, STAINLESS, MOMENTARY PULSE, 24VAC/DC 1NO, RED-GREEN-BLUE	\$ 195.30
SBR1-A-AW-1-N	PIEZO PUSHBUTTON 22mm, ALUMINIUM, MOMENTARY PULSE, 24VAC/DC 1NO, 0.2A , RED	\$ 195.90
SBR2-A-BW-2-N	PIEZO PUSHBUTTON 22mm, ALUMINIUM, MOMENTARY PULSE, 24VAC/DC 1NO, 0.2A, GREEN	\$ 214.90



SBR11

## LED Illuminated Pushbuttons, Pilot Lights and Buzzers for 16mm dia Panel Mounting

16mm diameter pushbuttons, momentary or latching, with built-in LED indication and matching pilot lights in amber, blue, green, red, white or yellow. Available in 18 x 24mm rectangle or 18mm round head size, 24Vac/dc or 240Vac versions

SE16D-240V-AM-F1		PUSHBUTTON 16mm, MOMENTARY, LED, 240VAC, 18x24 BEZEL, 2NO+2NC, AMBER	\$ 27.30
SE16D-240V-AM-F1/L		PUSHBUTTON 16mm, LATCHING, LED, 240VAC, 18x24 BEZEL, 2NO+2NC, AMBER	\$ 27.30
SE16D-240V-AM-F3		PUSHBUTTON 16mm, MOMENTARY, LED, 240VAC, 18mm Ø, 2NO+2NC, AMBER	\$ 27.30
SE16D-240V-AM-F3/L		PUSHBUTTON, 16mm, LATCHING, LED, 240VAC, 18mm Ø, 2NO+2NC, AMBER	\$ 27.30
SE16D-240V-BL-F1		PUSHBUTTON 16mm, MOMENTARY, LED, 240VAC, 18x24mm BEZEL, 2NO+2NC, BLUE	\$ 27.30
SE16D-240V-BL-F1/L		PUSHBUTTON 16mm, LATCHING, LED, 240VAC, 18x24mm BEZEL, 2NO+2NC, BLUE	\$ 27.30
SE16D-240V-BL-F3		PUSHBUTTON 16mm, MOMENTARY, LED, 240VAC, 18mm Ø, 2NO+2NC, BLUE	\$ 27.30
SE16D-240V-BL-F3/L		PUSHBUTTON, 16mm, LATCHING, LED, 240VAC, 18mm Ø, 2NO+2NC, BLUE	\$ 27.30
SE16D-240V-GR-F1		PUSHBUTTON 16mm, MOMENTARY, LED, 240VAC, 18x24mm BEZEL, 2NO+2NC, GREEN	\$ 27.30
SE16D-240V-GR-F1/L		PUSHBUTTON 16mm, LATCHING, LED, 240VAC, 18x24mm BEZEL, 2NO+2NC, GREEN	\$ 27.30
SE16D-240V-GR-F3		PUSHBUTTON 16mm, MOMENTARY, LED, 240VAC, 18mm Ø, 2NO+2NC, GREEN	\$ 27.30
SE16D-240V-GR-F3/L		PUSHBUTTON 16mm, LATCHING, LED, 240VAC, 18mm Ø, 2NO+2NC, GREEN	\$ 27.30
SE16D-240V-RD-F1		PUSHBUTTON 16mm, MOMENTARY, LED, 240VAC, 18x24mm BEZEL, 2NO+2NC, RED	\$ 27.30
SE16D-240V-RD-F1/L		PUSHBUTTON 16mm, LATCHING, LED, 240VAC, 18x24mm BEZEL, 2NO+2NC, RED	\$ 27.30
SE16D-240V-RD-F3		PUSHBUTTON 16mm, MOMENTARY, LED, 240VAC, 18mm Ø, 2NO+2NC, RED	\$ 27.30
SE16D-240V-RD-F3/L		PUSHBUTTON 16mm, LATCHING, LED, 240VAC, 18mm Ø, 2NO+2NC, RED	\$ 27.30
SE16D-240V-WH-F1		PUSHBUTTON 16mm, MOMENTARY, LED, 240VAC, 18x24mm BEZEL, 2NO+2NC, WHITE	\$ 27.30
SE16D-240V-WH-F1/L		PUSHBUTTON 16mm, LATCHING, LED, 240VAC, 18x24mm BEZEL, 2NO+2NC, WHITE	\$ 27.30
SE16D-240V-WH-F3		PUSHBUTTON 16mm, MOMENTARY, LED, 240VAC, 18mm Ø, 2NO+2NC, WHITE	\$ 27.30
SE16D-240V-WH-F3/L		PUSHBUTTON, 16mm, LATCHING, LED, 240VAC, 18mm Ø, 2NO+2NC, WHITE	\$ 27.30
SE16D-240V-YE-F1		PUSHBUTTON 16mm, MOMENTARY, LED, 240VAC, 18x24mm BEZEL, 2NO+2NC, YELLOW	\$ 27.30
SE16D-240V-YE-F1/L		PUSHBUTTON 16mm, LATCHING, LED, 240VAC, 18x24mm BEZEL, 2NO+2NC, YELLOW	\$ 27.30
SE16D-240V-YE-F3		PUSHBUTTON 16mm, MOMENTARY, LED, 240VAC, 18mm Ø, 2NO+2NC, YELLOW	\$ 27.30
SE16D-240V-YE-F3/L		PUSHBUTTON 16mm, LATCHING, LED, 240VAC, 18mm Ø, 2NO+2NC, YELLOW	\$ 27.30
SE16D-24V-AM-F1		PUSHBUTTON 16mm, MOMENTARY, LED, 24VAC/DC, 18x24mm BEZEL, 2NO+2NC, AMBER	\$ 27.30
SE16D-24V-AM-F1/L		PUSHBUTTON 16mm, LATCHING, LED, 24VAC/DC, 18x24mm BEZEL, 2NO+2NC, AMBER	\$ 27.30
SE16D-24V-AM-F3		PUSHBUTTON 16mm, MOMENTARY, LED, 24VACDC, 18mm Ø, 2NO+2NC, AMBER	\$ 27.30
SE16D-24V-AM-F3/L		PUSHBUTTON 16mm, LATCHING, LED, 24VACDC, 18mm Ø, 2NO+2NC, AMBER	\$ 27.30
SE16D-24V-BL-F1		PUSHBUTTON 16mm, MOMENTARY, LED, 24VAC/DC, 18x24mm BEZEL, 2NO+2NC, BLUE	\$ 27.30
SE16D-24V-BL-F1/L		PUSHBUTTON 16mm, LATCHING, LED, 24VAC/DC, 18x24mm BEZEL, 2NO+2NC, BLUE	\$ 27.30
SE16D-24V-BL-F3		PUSHBUTTON 16mm, MOMENTARY, LED, 24VACDC, 18mm Ø, 2NO+2NC, BLUE	\$ 27.30
SE16D-24V-BL-F3/L		PUSHBUTTON 16mm, LATCHING, LED, 24VACDC, 18mm Ø, 2NO+2NC, BLUE	\$ 27.30
SE16D-24V-GR-F1		PUSHBUTTON 16mm, MOMENTARY, LED, 24VAC/DC, 18x24mm BEZEL, 2NO+2NC, GREEN	\$ 27.30
SE16D-24V-GR-F1/L		PUSHBUTTON 16mm, LATCHING, LED, 24VAC/DC, 18x24mm BEZEL, 2NO+2NC, GREEN	\$ 27.30
SE16D-24V-GR-F3		PUSHBUTTON 16mm, MOMENTARY, LED, 24VAC/DC, 18x18mm BEZEL, 2NO+2NC, GREEN	\$ 27.30
SE16D-24V-GR-F3/L		PUSHBUTTON 16mm, LATCHING, LED, 24VACDC, 18mm Ø, 2NO+2NC, GREEN	\$ 27.30
SE16D-24V-RD-F1		PUSHBUTTON 16mm, MOMENTARY, LED, 24VAC/DC, 18x24mm BEZEL, 2NO+2NC, RED	\$ 27.30
SE16D-24V-RD-F1/L		PUSHBUTTON 16mm, LATCHING, LED, 24VAC/DC, 18x24mm BEZEL, 2NO+2NC, RED	\$ 27.30
SE16D-24V-RD-F3		PUSHBUTTON 16mm, MOMENTARY, LED, 24VACDC, 18mm Ø, 2NO+2NC, RED	\$ 27.30
SE16D-24V-RD-F3/L		PUSHBUTTON 16mm, LATCHING, LED, 24VACDC, 18mm Ø, 2NO+2NC, RED	\$ 27.30
SE16D-24V-WH-F1		PUSHBUTTON 16mm, MOMENTARY, LED, 24VAC/DC, 18x24mm BEZEL, 2NO+2NC, WHITE	\$ 27.30
SE16D-24V-WH-F1/L		PUSHBUTTON 16mm, LATCHING, LED, 24VAC/DC, 18x24mm BEZEL, 2NO+2NC, WHITE	\$ 27.30
SE16D-24V-WH-F3		PUSHBUTTON 16mm, MOMENTARY, LED, 24VACDC, 18mm Ø, 2NO+2NC, WHITE	\$ 27.30
SE16D-24V-WH-F3/L		PUSHBUTTON 16mm, LATCHING, LED, 24VACDC, 18mm Ø, 2NO+2NC, WHITE	\$ 27.30
SE16D-24V-YE-F1		PUSHBUTTON 16mm, MOMENTARY, LED, 24VAC/DC, 18x24mm BEZEL, 2NO+2NC, YELLOW	\$ 27.30
SE16D-24V-YE-F1/L		PUSHBUTTON 16mm, LATCHING, LED, 24VAC/DC, 18x24mm BEZEL, 2NO+2NC, YELLOW	\$ 27.30
SE16D-24V-YE-F2		PUSHBUTTON 16mm, MOMENTARY, LED, 24VAC/DC, 18x18mm BEZEL, 2NO+2NC, YELLOW	\$ 27.30
SE16D-24V-YE-F3		PUSHBUTTON 16mm, MOMENTARY, LED, 24VACDC, 18mm Ø, 2NO+2NC, YELLOW	\$ 27.30
SE16D-24V-YE-F3/L		PUSHBUTTON 16mm, LATCHING, LED, 24VACDC, 18mm Ø, 2NO+2NC, YELLOW	\$ 27.30
SE16D-AC-F7		SE16D REAR MOUNT SOCKET SOLDER CONNECTOR	\$ 4.00
SE16D-BZ/FL-24V-RD		BUZZER 16mm PANEL MOUNT, 18mm Ø, 80DB, 24VAC/DC, RED	\$ 33.70
SE16D-BZ-230V		BUZZER 16mm, PANEL MOUNT, 18mm Ø, 80DB, 230VAC, BLACK	\$ 31.10
SE16D-BZ-24V		BUZZER 16mm, PANEL MOUNT, 18mm Ø, 80DB, 24VAC/DC, BLACK	\$ 31.10
SE16DHF-SS11-2R-F3-K		SELECTOR SWITCH 16mm Ø, 2-POS LEFT-RIGHT MOMENTARY, 1NO+1NC	\$ 29.40
SE16D-IL-110V-RD	SE16D-BZ	LED INDICATOR, 16mm MOUNT, 18mm Ø, 110VAC/DC, RED	\$ 18.50
SE16D-IL-230V-AM		LED INDICATOR, 16mm MOUNT, 18mm Ø, 230VAC, AMBER	\$ 16.50
SE16D-IL-230V-BL		LED INDICATOR, 16mm MOUNT, 18mm Ø, 230VAC, BLUE	\$ 16.50
SE16D-IL-230V-GR		LED INDICATOR, 16mm MOUNT, 18mm Ø, 230VAC, GREEN	\$ 16.50
SE16D-IL-230V-RD		LED INDICATOR, 16mm MOUNT, 18mm Ø, 230VAC, RED	\$ 16.50
SE16D-IL-230V-WH		LED INDICATOR, 16mm MOUNT, 18mm Ø, 230VAC, WHITE	\$ 16.50
SE16D-IL-230V-YE		LED INDICATOR, 16mm MOUNT, 18mm Ø, 230VAC, YELLOW	\$ 16.50
SE16D-IL-24V-AM		LED INDICATOR, 16mm MOUNT, 18mm Ø, 24VAC/DC, AMBER	\$ 16.50
SE16D-IL-24V-BL		LED INDICATOR, 16mm MOUNT, 18mm Ø, 24VAC/DC, BLUE	\$ 16.50
SE16D-IL-24V-GR		LED INDICATOR, 16mm MOUNT, 18mm Ø, 24VAC/DC, GREEN	\$ 16.50
SE16D-IL-24V-RD		LED INDICATOR, 16mm MOUNT, 18mm Ø, 24VAC/DC, RED	\$ 16.50
SE16D-IL-24V-WH		LED INDICATOR, 16mm MOUNT, 18mm Ø, 24VAC/DC, WHITE	\$ 16.50
SE16D-IL-24V-YE		LED INDICATOR, 16mm MOUNT, 18mm Ø, 24VAC/DC, YELLOW	\$ 16.50
SE16D-PB-F3-CAP		SILICON CAP, IP67, FOR 18x18mm PUSHBUTTON	\$ 8.50



SE16D-F3





SE16D-F2





SE16D-BZ

## Pilot Lights and Buzzers – 22mm Mounting, Multi-chip Long-life LED


Super-bright LED pilot lights with polycarbonate lens and diffuser/legend insert, screw terminals, low power consumption, long life, available in red, amber, green, blue and white

SEL-22D-12-240V-AMB		LED INDICATOR, 22mm, 12-240VAC/DC, AMBER	\$ 32.60
SEL-22D-12-240V-BLUE		LED INDICATOR, 22mm, 12-240VAC/DC, BLUE	\$ 32.60
SEL-22D-12-240V-GRN		LED INDICATOR, 22mm, 12-240VAC/DC, GREEN	\$ 32.60
SEL-22D-12-240V-RED		LED INDICATOR, 22mm, 12-240VAC/DC, RED	\$ 32.60
SEL-22D-12-240V-WHI		LED INDICATOR, 22mm, 12-240VAC/DC, WHITE	\$ 32.60
SEL-22D-12V-AMBER		LED INDICATOR, 22mm, 12VDC, AMBER	\$ 32.60
SEL-22D-12V-BLUE		LED INDICATOR, 22mm, 12VDC, BLUE	\$ 32.60
SEL-22D-12V-GREEN		LED INDICATOR, 22mm, 12VDC, GREEN	\$ 32.60
SEL-22D-12V-RED		LED INDICATOR, 22mm, 12VDC, RED	\$ 32.60
SEL-22D-12V-WHITE		LED INDICATOR, 22mm, 12VDC, WHITE	\$ 32.60
SEL-22D-380V-BLUE		LED INDICATOR, 22mm, 380VAC, BLUE	\$ 32.60
SEL-22D-380V-GREEN		LED INDICATOR, 22mm, 380VAC, GREEN	\$ 32.60
SEL-22D-380V-RED		LED INDICATOR, 22mm, 380VAC, RED	\$ 32.60
SEL-22D-380V-WHITE		LED INDICATOR, 22mm, 380VAC, WHITE	\$ 32.60
SEL-22D-BZ/FL-240-R1		BUZZER, 22mm PANEL MOUNT, 29mm Ø, 80DB, 230VAC, RED	\$ 33.70
SEL-22D-BZ-230V	BUZZER, 22mm PANEL MOUNT, 29mm Ø, 80DB, 230VAC, BLACK	\$ 33.10	
SEL-22D-BZ-24V	BUZZER, 22mm PANEL MOUNT, 29mm Ø, 80DB, 24VAC/DC, BLACK	\$ 33.10	

### Pilot Lights for Switchboards and Control Panels


BD308-24V-GRN		LED INDICATOR, POLYCARB, 7mm Ø, SOLDER TERMINALS, 24VAC/DC, GREEN	\$ 15.20
BD308-24V-RED		LED INDICATOR, POLYCARB, 7mm Ø, SOLDER TERMINALS, 24VAC/DC, RED	\$ 15.20
BD308-24V-YEL		LED INDICATOR, POLYCARB, 7mm Ø, SOLDER TERMINALS, 24VAC/DC, YELLOW	\$ 15.20
8000LED-2.2V-GRN		NEON INDICATOR, CHROME, 7mm Ø, SOLDER TERMINALS, 2.2VDC, GREEN	\$ 17.50
8000LED-2.2V-RED		NEON INDICATOR, CHROME, 7mm Ø, SOLDER TERMINALS, 2.2VDC, RED	\$ 17.50
8000LED-12V-AMB		NEON INDICATOR, CHROME, 7mm Ø, SOLDER TERMINALS, 12VDC, AMBER	\$ 17.50
8000LED-12V-GRN		NEON INDICATOR, CHROME, 7mm Ø, SOLDER TERMINALS, 12VDC, GREEN	\$ 17.50
8000LED-12V-RED		NEON INDICATOR, CHROME, 7mm Ø, SOLDER TERMINALS, 12VDC, RED	\$ 17.50
8000LED-24V-AMB		NEON INDICATOR, CHROME, 7mm Ø, SOLDER TERMINALS, 24VDC, AMBER	\$ 17.50
8000LED-24V-GRN		NEON INDICATOR, CHROME, 7mm Ø, SOLDER TERMINALS, 24VDC, GREEN	\$ 17.50
8000LED-24V-RED		NEON INDICATOR, CHROME, 7mm Ø, SOLDER TERMINALS, 24VDC, RED	\$ 17.50
BN259-110-RED		NEON INDICATOR, CHROME, 7mm Ø, SOLDER TERMINALS, 110VAC, RED	\$ 17.50
BN259-220-GRN		NEON INDICATOR, CHROME, 7mm Ø, SOLDER TERMINALS, 220VAC, GREEN	\$ 17.50
BN259-220-ORG		NEON INDICATOR, CHROME, 7mm Ø, SOLDER TERMINALS, 220VAC, ORANGE	\$ 17.50
BN259-220-RED		NEON INDICATOR, CHROME, 7mm Ø, SOLDER TERMINALS, 220VAC, RED	\$ 17.50

### PL1R Panel Mounting Indicator, uses E10 filament or LED lamp up to 230V

PL1R-AMBER		INDICATOR 16mm Ø, ROUND LENS, E10 2W MAX, AMBER	\$ 12.00
PL1R-BLUE		INDICATOR 16mm Ø, ROUND LENS, E10 2W MAX, BLUE	\$ 12.00
PL1R-CLEAR		INDICATOR 16mm Ø, ROUND LENS, E10 2W MAX, CLEAR	\$ 12.00
PL1R-GREEN		INDICATOR 16mm Ø, ROUND LENS, E10 2W MAX, GREEN	\$ 12.00
PL1R-RED		INDICATOR 16mm Ø, ROUND LENS, E10 2W MAX, RED	\$ 12.00

### 22mm Pushbuttons


#### Pizzato Indicator Lenses

PZ E2 IND-W		INDICATOR LENS, WHITE (E2 11LA210)	\$ 9.20
PZ E2 IND-Y		INDICATOR LENS, WHITE (E2 11LA210)	\$ 9.20
PZ E2 IND-G		INDICATOR LENS, GREEN (E2 11LA410)	\$ 9.20
PZ E2 IND-R		INDICATOR LENS, RED (E2 11LA310)	\$ 9.20
PZ E2 IND-B		INDICATOR LENS, BLUE (E2 11LA610)	\$ 9.20
PZ E2 IND-O		INDICATOR LENS, ORANGE (E2 11LA810)	\$ 9.20
PZ E2 IND-W		INDICATOR LENS, WHITE (E2 11LA210)	\$ 9.20

#### Pizzato Non Illumination Type Push Button Actuators (Maintained)

PZ E2 PBF-M-W-BB		P/B ACTUATOR, FLUSH, MAINTAINED, WHITE OPAQUE, BLACK BEZEL (E2 1PU1R2210)	\$ 25.70
PZ E2 PBF-M-Y-BB		P/B ACTUATOR, FLUSH, MAINTAINED, YELLOW OPAQUE, BLACK BEZEL (E2 1PU1R5210)	\$ 25.70
PZ E2 PBF-M-G-BB		P/B ACTUATOR, FLUSH, MAINTAINED, GREEN OPAQUE, BLACK BEZEL (E2 1PU1R4210)	\$ 25.70
PZ E2 PBF-M-R-BB		P/B ACTUATOR, FLUSH, MAINTAINED, RED OPAQUE, BLACK BEZEL (E2 1PU1R3210)	\$ 25.70
PZ E2 PBF-M-B-BB		P/B ACTUATOR, FLUSH, MAINTAINED, BLUE OPAQUE, BLACK BEZEL (E2 1PU1R6210)	\$ 25.70
PZ E2 PBF-M-O-BB		P/B ACTUATOR, FLUSH, MAINTAINED, ORANGE OPAQUE, BLACK BEZEL (E2 1PU1R8210)	\$ 25.70
PZ E2 PBF-M-W-BC		P/B ACTUATOR, FLUSH, MAINTAINED, WHITE OPAQUE, CHROME BEZEL (E2 1PU1R2290)	\$ 28.00
PZ E2 PBF-M-Y-BC		P/B ACTUATOR, FLUSH, MAINTAINED, YELLOW OPAQUE, CHROME BEZEL (E2 1PU1R5290)	\$ 28.00
PZ E2 PBF-M-G-BC		P/B ACTUATOR, FLUSH, MAINTAINED, GREEN OPAQUE, CHROME BEZEL (E2 1PU1R4290)	\$ 28.00
PZ E2 PBF-M-R-BC		P/B ACTUATOR, FLUSH, MAINTAINED, RED OPAQUE, CHROME BEZEL (E2 1PU1R3290)	\$ 28.00
PZ E2 PBF-M-B-BC		P/B ACTUATOR, FLUSH, MAINTAINED, BLUE OPAQUE, CHROME BEZEL (E2 1PU1R6290)	\$ 28.00
PZ E2 PBF-M-O-BC		P/B ACTUATOR, FLUSH, MAINTAINED, ORANGE OPAQUE, BLACK BEZEL (E2 1PU1R8290)	\$ 18.00

#### Pizzato Non Illumination Type Push Button Actuators (Momentary)

PZ E2 PBF-W-BB		P/B ACTUATOR, FLUSH, MOMENTARY, WHITE OPAQUE, BLACK BEZEL (E2 1PU2R2210)	\$ 18.00
PZ E2 PBF-Y-BB		P/B ACTUATOR, FLUSH, MOMENTARY, YELLOW OPAQUE, BLACK BEZEL (E2 1PU2R5210)	\$ 18.00
PZ E2 PBF-G-BB		P/B ACTUATOR, FLUSH, MOMENTARY, GREEN OPAQUE, BLACK BEZEL (E2 1PU2R4210)	\$ 18.00
PZ E2 PBF-R-BB		P/B ACTUATOR, FLUSH, MOMENTARY, RED OPAQUE, BLACK BEZEL (E2 1PU2R3210)	\$ 18.00
PZ E2 PBF-B-BB		P/B ACTUATOR, FLUSH, MOMENTARY, BLUE OPAQUE, BLACK BEZEL (E2 1PU2R6210)	\$ 18.00
PZ E2 PBF-O-BB		P/B ACTUATOR, FLUSH, MOMENTARY, ORANGE OPAQUE, BLACK BEZEL (E2 1PU2R8210)	\$ 18.00
PZ E2 PBF-W-BC		P/B ACTUATOR, FLUSH, MOMENTARY, WHITE OPAQUE, CHROME BEZEL (E2 1PU2R2290)	\$ 18.00
PZ E2 PBF-Y-BC		P/B ACTUATOR, FLUSH, MOMENTARY, YELLOW OPAQUE, CHROME BEZEL (E2 1PU2R5290)	\$ 18.00
PZ E2 PBF-G-BC		P/B ACTUATOR, FLUSH, MOMENTARY, GREEN OPAQUE, CHROME BEZEL (E2 1PU2R4290)	\$ 18.00
PZ E2 PBF-R-BC		P/B ACTUATOR, FLUSH, MOMENTARY, RED OPAQUE, CHROME BEZEL (E2 1PU2R3290)	\$ 18.00
PZ E2 PBF-B-BC		P/B ACTUATOR, FLUSH, MOMENTARY, BLUE OPAQUE, CHROME BEZEL (E2 1PU2R6290)	\$ 18.00
PZ E2 PBF-O-BC		P/B ACTUATOR, FLUSH, MOMENTARY, ORANGE OPAQUE, BLACK BEZEL (E2 1PU2R8290)	\$ 18.00



## Pizzato Illumination Type Push Button Actuators (Maintained)

PZ E2 PBFI-M-W-BB	P/B ACTUATOR, FLUSH, MAINTAINED, WHITE TRANSPARENT, BLACK BEZEL (E21PL1R2210)	\$ 35.05
PZ E2 PBFI-M-Y-BB	P/B ACTUATOR, FLUSH, MAINTAINED, YELLOW TRANSPARENT, BLACK BEZEL (E21PL1R5210)	\$ 35.05
PZ E2 PBFI-M-G-BB	P/B ACTUATOR, FLUSH, MAINTAINED, GREEN TRANSPARENT, BLACK BEZEL (E21PL1R4210)	\$ 35.05
PZ E2 PBFI-M-R-BB	P/B ACTUATOR, FLUSH, MAINTAINED, RED TRANSPARENT, BLACK BEZEL (E21PL1R3210)	\$ 35.05
PZ E2 PBFI-M-B-BB	P/B ACTUATOR, FLUSH, MAINTAINED, BLUE TRANSPARENT, BLACK BEZEL (E21PL1R6210)	\$ 35.05
PZ E2 PBFI-M-O-BB	P/B ACTUATOR, FLUSH, MAINTAINED, ORANGE TRANSPARENT, BLACK BEZEL (E21PL1R8210)	\$ 35.05
PZ E2 PBFI-M-W-BC	P/B ACTUATOR, FLUSH, MAINTAINED, WHITE TRANSPARENT, CHROME BEZEL (E21PL1R2290)	\$ 35.05
PZ E2 PBFI-M-Y-BC	P/B ACTUATOR, FLUSH, MAINTAINED, YELLOW TRANSPARENT, CHROME BEZEL (E21PL1R5290)	\$ 35.05
PZ E2 PBFI-M-G-BC	P/B ACTUATOR, FLUSH, MAINTAINED, GREEN TRANSPARENT, CHROME BEZEL (E21PL1R4290)	\$ 35.05
PZ E2 PBFI-M-R-BC	P/B ACTUATOR, FLUSH, MAINTAINED, RED TRANSPARENT, CHROME BEZEL (E21PL1R3290)	\$ 35.05
PZ E2 PBFI-M-B-BC	P/B ACTUATOR, FLUSH, MAINTAINED, BLUE TRANSPARENT, CHROME BEZEL (E21PL1R6290)	\$ 35.05
PZ E2 PBFI-M-O-BC	P/B ACTUATOR, FLUSH, MAINTAINED, ORANGE TRANSPARENT, CHROME BEZEL (E21PL1R8290)	\$ 35.05

## Pizzato Illumination Type Push Button Actuators (Momentary)

PZ E2 PBFI-W-BB	P/B ACTUATOR, FLUSH, MOMENTARY, WHITE TRANSPARENT, CHROME BEZEL (E21PL2R2210)	\$ 35.05
PZ E2 PBFI-Y-BB	P/B ACTUATOR, FLUSH, MOMENTARY, YELLOW TRANSPARENT, BLACK BEZEL (E21PL2R5210)	\$ 35.05
PZ E2 PBFI-G-BB	P/B ACTUATOR, FLUSH, MOMENTARY, GREEN TRANSPARENT, BLACK BEZEL (E21PL1R4210)	\$ 35.05
PZ E2 PBFI-R-BB	P/B ACTUATOR, FLUSH, MOMENTARY, RED TRANSPARENT, BLACK BEZEL (E21PL2R3210)	\$ 35.05
PZ E2 PBFI-B-BB	P/B ACTUATOR, FLUSH, MOMENTARY, BLUE TRANSPARENT, BLACK BEZEL (E21PL2R6210)	\$ 35.05
PZ E2 PBFI-O-BB	P/B ACTUATOR, FLUSH, MOMENTARY, ORANGE TRANSPARENT, BLACK BEZEL (E21PL2R8210)	\$ 35.05
PZ E2 PBFI-W-BC	P/B ACTUATOR, FLUSH, MOMENTARY, WHITE TRANSPARENT, CHROME BEZEL (E21PL2R2290)	\$ 35.05
PZ E2 PBFI-Y-BC	P/B ACTUATOR, FLUSH, MOMENTARY, YELLOW TRANSPARENT, CHROME BEZEL (E21PL2R5290)	\$ 35.05
PZ E2 PBFI-G-BC	P/B ACTUATOR, FLUSH, MOMENTARY, GREEN TRANSPARENT, CHROME BEZEL (E21PL2R4290)	\$ 35.05
PZ E2 PBFI-R-BC	P/B ACTUATOR, FLUSH, MOMENTARY, RED TRANSPARENT, CHROME BEZEL (E21PL2R3290)	\$ 35.05
PZ E2 PBFI-B-BC	P/B ACTUATOR, FLUSH, MOMENTARY, BLUE TRANSPARENT, CHROME BEZEL (E21PL2R6290)	\$ 35.05
PZ E2 PBFI-O-BC	P/B ACTUATOR, FLUSH, MOMENTARY, ORANGE TRANSPARENT, CHROME BEZEL (E21PL2R8290)	\$ 35.05

## Pizzato Mounting Adaptors

PZ E2 MA-3S	MOUNTING ADAPTOR FOR E2 CONTACT & LED BLOCKS, 3 SLOT (E2 1BAC11)	\$ 2.80
PZ E2 MA-4S	MOUNTING ADAPTOR FOR E2 CONTACT & LED BLOCKS, 4 SLOT (E2 1BAC21)	\$ 3.60

## Pizzato Contact Blocks

PZ E2 CB-NO	CONTACT BLOCK, 10A AC15, 2.5A, DC13 @ 24V, NO, (E2 CP10G2V1)	\$ 20.00
PZ E2 CB-NC	CONTACT BLOCK, 10A AC15, 2.5A, DC13 @ 24V, NC, (E2 CP01G2V1)	\$ 20.00

## Pizzato Illumination Blocks - 230VAC

PZ E2 IB-1230-B	LED ILLUMINATION BLOCK, 195-264VAC, BLUE (E2 LP4A6V1)	\$ 33.60
PZ E2 IB-1230-G	LED ILLUMINATION BLOCK, 195-264VAC, GREEN (E2 LP4A4V1)	\$ 33.60
PZ E2 IB-1230-O	LED ILLUMINATION BLOCK, 195-264VAC, ORANGE (E2 LP4A8V1)	\$ 33.60
PZ E2 IB-1230-R	LED ILLUMINATION BLOCK, 195-264VAC, RED (E2 LP4A3V1)	\$ 33.60
PZ E2 IB-1230-W	LED ILLUMINATION BLOCK, 195-264VAC, WHITE (E2 LP4A2V1)	\$ 33.60

## Pizzato Illumination Blocks - 24VDC

PZ E2 IB-124-B	LED ILLUMINATION BLOCK, 12-30VAC/DC, BLUE (E2 LP1A6V1)	\$ 25.30
PZ E2 IB-124-G	LED ILLUMINATION BLOCK, 12-30VAC/DC, GREEN (E2 LP1A4V1)	\$ 25.30
PZ E2 IB-124-O	LED ILLUMINATION BLOCK, 12-30VAC/DC, ORANGE (E2 LP1A8V1)	\$ 25.30
PZ E2 IB-124-R	LED ILLUMINATION BLOCK, 12-30VAC/DC, RED (E2 LP1A3V1)	\$ 25.30
PZ E2 IB-124-W	LED ILLUMINATION BLOCK, 12-30VAC/DC, WHITE (E2 LP1A2V1)	\$ 25.30




## Pizzato 22mm Hole Enclosures

PZ ES 31000	ENCLOSURE, POLYCARBONATE, 1 HOLE, 72x80Hx56mm, GREY/ BLACK BASE	\$ 38.80
PZ ES 31001	ENCLOSURE, POLYCARBONATE, 1 HOLE, 72x80Hx56mm, YELLOW/ BLACK BASE	\$ 38.80
PZ ES 33003	ENCLOSURE, POLYCARBONATE, 2 HOLE, 153x80Hx56mm, GREY/ BLACK BASE	\$ 62.60
PZ ES 33000	ENCLOSURE, POLYCARBONATE, 3 HOLE, 153x80Hx56mm, GREY/ BLACK BASE	\$ 62.60
PZ ES 34000	ENCLOSURE, POLYCARBONATE, 4 HOLE, 186x80Hx56mm, GREY/ BLACK BASE	\$ 70.80
PZ ES 36003	ENCLOSURE, POLYCARBONATE, 5 HOLE, 252x80Hx56mm, GREY/ BLACK BASE	\$ 88.45
PZ ES 36000	ENCLOSURE, POLYCARBONATE, 6 HOLE, 252x80Hx56mm, GREY/ BLACK BASE	\$ 88.45



## Pizzato Complete Emergency Stop Buttons

PZ E2 AC-DXBC0400		PUSHBUTTON, FLUSH, BLACK BEZEL, ILLUMINATED, WHITE, 1 NO+1NC, 12-30VAC/DC	\$ 72.95
PZ E2 AC-DXBC0401		PUSHBUTTON, FLUSH, BLACK BEZEL, ILLUMINATED, GREEN, 1 NO+1NC, 12-30VAC/DC	\$ 72.95
PZ E2 AC-DXBC0402		PUSHBUTTON, FLUSH, BLACK BEZEL, ILLUMINATED, RED, 1 NO+1NC, 12-30VAC/DC	\$ 72.95
PZ E2 AC-DXBC0403		PUSHBUTTON, FLUSH, BLACK BEZEL, ILLUMINATED, BLUE, 1 NO+1NC, 12-30VAC/DC	\$ 72.95
PZ E2 AC-DXBC0404		PUSHBUTTON, FLUSH, BLACK BEZEL, ILLUMINATED, YELLOW, 1 NO+1NC, 12-30VAC/DC	\$ 72.95
PZ E2 AC-DXBC1000		EMERGENCY STOP PUSHBUTTON, ROTARY RELEASE, 2 NC+1 NO	\$ 67.80
PZ E2 AC-DXBC1002		EMERGENCY STOP PUSHBUTTON, ROTARY RELEASE, 2 NC	\$ 56.70
PZ E2 AC-DXBC1401		LEVER SWITCH 2 POSITION, 1 NO, BLACK BEZEL	\$ 41.80
PZ E2 AC-DXBC1402		LEVER SWITCH 2 POSITION, SPRING RETURN, 1 NO, BLACK BEZEL .	\$ 41.80
PZ E2 AC-DXBC1601		KEY SWITCH, 2 POSITION KEY REMOVABLE IN THE OFF POSITION, 1 NO, BLACK BEZEL	\$ 66.30
PZ E2 AC-DXBC1606	KEY SWITCH, 2 POSITION SPRING RETURN, 1 NO, BLACK BEZEL, .	\$ 68.60	
PZ E2 AC-DXBC2000	PUSHBUTTON, QUADRUPLE, UP-DOWN-LEFT-RIGHT ARROWS, 1 NO, CHROME BEZEL	\$ 194.50	
PZ ES AC31005		EMERGENCY STOP PUSHBUTTON C/W ENCLOSURE, 2NC	\$ 99.60
PZ ES AC31009		EMERGENCY PUSH PULL STOP BUTTON, 2 NC, WITH YELLOW ENCLOSURE	\$ 98.20
PZ ES AC31435		EMERGENCY STOP PUSHBUTTON ILLUMINATED RING TYPE WITH ENCLOSURE	\$ 214.00



## Pizzato Contact Blocks

PZ E2 CB-NC		CONTACT BLOCK, 10A AC15, 2.5A, DC13 @ 24V, NC, (E2 CP01G2V1)	\$ 20.00
PZ E2 CB-NO		CONTACT BLOCK, 10A AC15, 2.5A, DC13 @ 24V, NO, (E2 CP10G2V1)	\$ 20.00
PZ E2 CF01G2V1		CONTACT BLOCK, BASE MOUNT, 1NC , USE WITH E-STOP STATION	\$ 20.00
PZ E2 CF01S2V1		CONTACT BLOCK, BASE MOUNT, 1NC SELF MONITORING, USE WITH E-STOP BUTTON	\$ 25.00
PZ E2 CF10G2V1		CONTACT BLOCK, BASE MOUNT, 1NO, SLOW ACTION	\$ 20.00
PZ E2 CP01S2V1		SELF MONITORING PANEL MOUNT CONTACT, NC, USE WITH E-STOP BUTTON	\$ 25.00


## Pizzato Illuminated Rings

PZ VE DL1A2D00		ILLUMINATED RING, 60mm DIA, DUAL FUNCTION - WHITE	\$ 74.50
PZ VE DL1A5D00		ILLUMINATED RING, 60mm DIA, DUAL FUNCTION - YELLOW	\$ 74.50
PZ VE DL1A5D00-MM		ILLUMINATED RING, 60mm DIA, DUAL FUNCTION - YELLOW-ENGRAVED MAINTENANCE MODE	\$ 106.25
PZ VE DL1A5D09		EMERGENCY STOP LABEL, 60mm DIA, ILLUMINATED DUAL FUNCTION	\$ 75.90
PZ VE DL1A5L13		YELLOW WITH TRIANGLE LABEL 60mm DIA ILLUMINATED BLINKING FUNCTION	\$ 75.90

## Pizzato 22mm Hole Labels

PZ VE TF12H12GB0		ENGRAVED LABEL FOR EROUND PRODUCTS - STOP	\$ 6.70
PZ VE TF12H12GB1		ENGRAVED LABEL FOR EROUND PRODUCTS - START	\$ 6.70
PZ VE TF12H12GB10		ENGRAVED LABEL FOR EROUND PRODUCTS - OFF - ON	\$ 6.70
PZ VE TF12H12GB12		ENGRAVED LABEL FOR EROUND PRODUCTS - MAN 0 AUTO	\$ 6.70
PZ VE TF12H12GB14		ENGRAVED LABEL FOR EROUND PRODUCTS - RESET	\$ 6.70
PZ VE TF12H12GB15		ENGRAVED LABEL FOR EROUND PRODUCTS - FORWARD	\$ 14.00
PZ VE TF12H12GB16		ENGRAVED LABEL FOR EROUND PRODUCTS - REVERSE	\$ 14.00
PZ VE TF12H12GB2		ENGRAVED LABEL FOR EROUND PRODUCTS - CLOSE	\$ 6.70
PZ VE TF12H12GB22		ENGRAVED LABEL FOR EROUND PRODUCTS - HIGH	\$ 14.00
PZ VE TF12H12GB23		ENGRAVED LABEL FOR EROUND PRODUCTS - LOW	\$ 14.00
PZ VE TF12H12GB3		ENGRAVED LABEL FOR EROUND PRODUCTS - UP	\$ 6.70
PZ VE TF12H12GB32		ENGRAVED LABEL FOR EROUND PRODUCTS - OPEN	\$ 14.00
PZ VE TF12H12GB4		ENGRAVED LABEL FOR EROUND PRODUCTS - DOWN	\$ 6.70
PZ VE TF12H12GB7		ENGRAVED LABEL FOR EROUND PRODUCTS - RUN	\$ 14.00
PZ VE TF12H12GB8		ENGRAVED LABEL FOR EROUND PRODUCTS - FAULT	\$ 14.00
PZ VE TF12H1700		BLANK BLACK LABEL FOR EROUND PRODUCTS	\$ 4.90
PZ VE TF32A5102		EMERGENCY STOP LABEL, 60mm DIAMETER FOR EROUND SERIES	\$ 10.00
PZ VE TF32D5102		EMERGENCY STOP LABEL, 90mm DIAMETER FOR EROUND SERIES	\$ 10.00


## Pizzato 22mm Sockets

PZ E2 1RJ451AAK		RJ45 SOCKET CAT5E - FEMALE FRONT+ REAR, IP67, BLACK BEZEL	\$ 90.20
PZ E2 1RJ459CAK		RJ45 SOCKET CAT6 - FEMALE FRONT+ REAR, IP67, CHROME BEZEL	\$ 101.90
PZ E2 1USB1AAK		USB3.0 SOCKET, FEMALE FRONT+ REAR, IP67, BLACK BEZEL	\$ 95.00


## Pizzato 22mm Potentiometers

PZ E6 1DM001K-D119		POTENTIOMETER, 1 WATT, 1KOHM, IP67/69K, CHROME BEZEL	\$ 145.00
PZ E6 1DM010K-D119		POTENTIOMETER, 1 WATT, 10KOHM, IP67/69K, CHROME BEZEL	\$ 145.00
PZ E6 1DM022K-D319		POTENTIOMETER, 0.5 WATT, 22KOHM, IP67/69K, CHROME BEZEL	\$ 133.00
PZ E6 1DM02K2-D119		POTENTIOMETER, 1 WATT, 2.2KOHM, IP67/69K, CHROME BEZEL	\$ 145.00
PZ E6 1DM04K7-D111		POTENTIOMETER, 1 WATT, 4.7KOHM, IP67/69K, BLACK BEZEL	\$ 142.80
PZ E6 1DM04K7-D119		POTENTIOMETER, 1 WATT, 4.7KOHM, IP67/69K, CHROME BEZEL	\$ 145.00


## Pizzato Joy Sticks double actions-uses PZ MAS-3S,quad actions use PZ MA- 4S

PZ E2 1MA12BZ91		JOYSTICK, 55mm HIGH, UP-DOWN, MOMENTARY, IP67+IP69K, CHROME BEZEL	\$ 132.80
PZ E2 1MA12EZ91		JOYSTICK, 55mm HIGH, LEFT-RIGHT, MAINTAINED, IP67+IP69K, CHROME BEZEL	\$ 132.80
PZ E2 1MA12FZ91		JOYSTICK, 55mm HIGH, LEFT-RIGHT, MOMENTARY IP67+ IP69K, CHROME BEZEL	\$ 132.80
PZ E2 1MA14AZ91		JOYSTICK, 55mm HIGH, LEFT-RIGHT-UP-DOWN, MAINTAINED, IP67+ IP69K, CHROME BEZEL	\$ 132.80
PZ E2 1MA14BZ91		JOYSTICK, 55mm HIGH, LEFT-RIGHT-UP-DOWN, IMOMENTARY,P67+ IP69K, CHROME BEZEL	\$ 139.80


## Pizzato Key Switches-uses PZ MA-3S

PZ E2 1SC2AVA19AA		KEY SWITCH, 2 POSITION, KEY REMOVABLE IN THE OFF POSITION, CHROME BEZEL	\$ 54.80
PZ E2 1SC2DVA19AA		KEY SWITCH, 2 POSITION, SPRING RETURN, CHROME BEZEL	\$ 57.10
PZ E2 AC-DXBC1601		KEY SWITCH, 2 POSITION KEY REMOVABLE IN THE OFF POSITION, 1 NO, BLACK BEZEL	\$ 66.30
PZ E2 AC-DXBC1606		KEY SWITCH, 2 POSITION SPRING RETURN, 1 NO, BLACK BEZEL, .	\$ 68.60

## Pizzato Pizzato LeverSwitches-uses PZ MA-3S

PZ E2 1SE12AVA11AB		LEVER SWITCH BLACK, 2 POSITION MAINTAINED, BLACK BEZEL	\$ 28.20
PZ E2 1SE12AVA19AB		LEVER SWITCH BLACK, 2 POSITION MAINTAINED, CHROME BEZEL	\$ 28.20
PZ E2 1SE13ACE11AB		LEVER SWITCH BLACK, 3 POSITION MAINTAINED, BLACK BEZEL	\$ 32.00
PZ E2 1SE13ACE19AB		LEVER SWITCH BLACK 3 POSITION MAINTAINED CHROME BEZEL	\$ 32.00
PZ E2 1SE13ECE19AB		LEVER SWITCH BLACK, 3 POSITION SPRING RETURN FROM RIGHT, CHROME BEZEL	\$ 27.20
PZ E2 AC-DXBC1401		LEVER SWITCH 2 POSITION,1 NO, BLACK BEZEL	\$ 41.80
PZ E2 AC-DXBC1402		LEVER SWITCH 2 POSITION, SPRING RETURN,1 NO, BLACK BEZEL .	\$ 41.80


## Pizzato Multi Button Actuators(Momentary)-doubles&triples use PZ MA-3S,quadruple use PZ MA-4S

PZ E2 DPBF-B-BC		DOUBLE P/B ACTUATOR, BLACK, FLUSH, UP-DOWN, MOM, CHROME BEZEL (E2 1PDRL9AAB)	\$ 35.05
PZ E2 DPBFI BK/W-BC		DOUBLE P/B ACTUATOR, FLUSH, BLACK/WHITE, MOM, CHROME BEZEL, (E2 1PDRL90221)	\$ 35.05
PZ E2 QPBF-B-BC		QUAD P/B ACTUATOR, FLUSH, MOMENTARY, U-D-L-R, CHROME BEZEL (E2 1PQFA9 QAAA)	\$ 146.70

## Visual Alarms - Xenon & LED

### XB2 Xenon Flashing Beacons


XB2 Series low cost IP65 Xenon flashing beacon, 2J energy @ 1Hz flash rate. Size 72mm dia x 55mm high. NOTE: This is a low-cost product with a limited (500,000 flashes) lamp life, and is not suitable for continuous duty applications

XB2-12DC-AMB		XENON STROBE 2J 12VDC AMBER	\$ 78.40
XB2-12DC-RED		XENON STROBE 2J 12VDC RED	\$ 78.40
XB2-24AC-AMB		XENON STROBE 2J 24VAC AMBER	\$ 78.40
XB2-24AC-BLUE		XENON STROBE 2J 24VAC BLUE	\$ 78.40
XB2-24AC-RED		XENON STROBE 2J 24VAC RED	\$ 78.40
XB2-24DC-AMB		XENON STROBE 2J 24VDC AMBER	\$ 78.40
XB2-24DC-BLUE		XENON STROBE 2J 24VDC BLUE	\$ 78.40
XB2-24DC-RED		XENON STROBE 2J 24VDC RED	\$ 78.40
XB2-230-AMB		XENON STROBE 2J 230VAC AMBER	\$ 78.40
XB2-230-BLUE		XENON STROBE 2J 230VAC BLUE	\$ 78.40
XB2-230-RED		XENON STROBE 2J 230VAC RED	\$ 78.40


XB2

### Solex Xenon Flashing Beacons

Solex Xenon flashing beacon 2J energy@ 1Hz flash rate, 10-60Vdc 80mA@ 24Vdc. Available with amber, blue, green, or red lens. Base colour can be white or red. IP54 with a shallow base, IP65 by using a deep base. 93mm Dia x 66mm high with shallow base. In addition they can be powered from 110Vac or 230Vac by using a Deep Powered Base that incorporates a 100mA 24Vdc power supply

SO-A-DW-10C		SOLEX XENON BEACON,10CD, 10-60VDC, DEEP WHITE BASE, AMBER	\$ 202.30
SO-A-SW-10C		SOLEX XENON BEACON,10CD, 10-60VDC, SHALLOW WHITE BASE, AMBER	\$ 178.50
SO-B-SW-10C		SOLEX XENON BEACON,10CD, 10-60VDC, SHALLOW WHITE BASE, BLUE	\$ 178.50
SO-G-SW-10C		SOLEX XENON BEACON,10CD, 10-60VDC, SHALLOW WHITE BASE, GREEN	\$ 178.50
SO-R-SR-10C		SOLEX XENON BEACON,10CD, 10-60VDC, SHALLOW RED BASE, RED	\$ 178.50
SO-R-SR-15C		SOLEX XENON BEACON,15CD, 10-60VDC, SHALLOW RED BASE, RED ( INDENT ONLY )	\$ 195.60


SOLEX

BASE-DEEP-RED		FULLEON SOUNDER/BEACON BASE, 50x93mm, RED	\$ 23.80
BASE-DEEP-WHITE		FULLEON SOUNDER/BEACON BASE, 50x93mm, WHITE	\$ 23.80
BASE-SHALLOW-RED		FULLEON SOUNDER/BEACON BASE, 20x93mm, RED	\$ 23.80
BASE-SHALLOW-WHITE		FULLEON SOUNDER/BEACON BASE, 20x93mm, RED	\$ 23.80
BASE-DEEP-PWD-RED		FULLEON POWERED BASE, 50x93mm, INPUT 110-240VAC - OUT 24VDC 100mA, RED	\$ 58.20
BASE-DEEP-PWD-WHITE		FULLEON POWERED BASE, 50x93mm, INPUT 110-240VAC - OUT 24VDC 100mA, WHITE	\$ 58.20

BASE-DEEP-PWD

### Pfannenbergl Xenon Strobe Lights, IP65



The Quadro F12 Xenon flasher from Pfannenbergl will still produce 70% light emission after 12 million flashes, and is available in red, amber, green, blue, yellow, opal and clear. Stock codes below; other colours on indent.

QUADRO-F12-115/CL		XENON FLASHER, 13J, IP67, 115VAC CLEAR	\$ 928.00
QUADRO-F12-230/AM		XENON FLASHER, 13J, IP67, 230VAC AMBER	\$ 843.60
QUADRO-F12-230/CL		XENON FLASHER, 13J, IP67, 230VAC CLEAR	\$ 850.70
QUADRO-F12-230/RD		XENON FLASHER, 13J, IP67, 230VAC RED	\$ 836.60
QUADRO-F12-24/AM		XENON FLASHER, 13J, IP67, 24VDC AMBER	\$ 1,033.50
QUADRO-F12-24/CL		XENON FLASHER, 13J, IP67, 24VDC CLEAR	\$ 1,040.50
QUADRO-F12-24/RD		XENON FLASHER, 13J, IP67, 24VDC RED	\$ 1,033.50
QUADRO-LENS-AMB		AMBER LENS ONLY FOR QUADRO F12 FLASHER	\$ 218.20
QUADRO-LENS-CLR		CLEAR LENS ONLY FOR QUADRO F12 FLASHER	\$ 218.20
QUADRO-LENS-RED		RED LENS ONLY FOR QUADRO F12 FLASHER	\$ 218.20

Quadro-F12

## J.Auer "Q" Series LED Beacon

Q series LED beacons offer steady/flashing (2Hz flash rate) models, or the multistrobe 3-option QBL. All units are IP66 rated when fitted with the appropriate gasket (see below), and fit for PLC applications (leakage, inrush current). The QDS is 94x94mmx98mm high, QDM is 132x132mm x137mm high, and QDL/QBL are 184x184x176 high. All models are perfect partners for the AS range of IP66 sounders


QDS-230V-AMBER		LED BEACON IP66, STEADY OR FLASHING, 240VAC AMBER	\$ 297.50
QDS-230V-BLUE		LED BEACON IP66, STEADY OR FLASHING, 240VAC BLUE	\$ 297.50
QDS-230V-CLEAR		LED BEACON IP66, STEADY OR FLASHING, 240VAC CLEAR	\$ 297.50
QDS-230V-GREEN		LED BEACON IP66, STEADY OR FLASHING, 240VAC GREEN	\$ 297.50
QDS-230V-RED		LED BEACON IP66, STEADY OR FLASHING, 240VAC RED	\$ 297.50
QDS-24V-AMBER		LED BEACON IP66, STEADY OR FLASHING, 24VAC/DC AMBER	\$ 251.20
QDS-24V-BLUE		LED BEACON IP66, STEADY OR FLASHING, 24VAC/DC BLUE	\$ 251.20
QDS-24V-CLEAR		LED BEACON IP66, STEADY OR FLASHING, 24VAC/DC CLEAR	\$ 251.20
QDS-24V-GREEN		LED BEACON IP66, STEADY OR FLASHING, 24VAC/DC GREEN	\$ 251.20
QDS-24V-RED		LED BEACON IP66, STEADY OR FLASHING, 24VAC/DC RED	\$ 251.20
QDM-230V-AMBER		LED BEACON IP66, STEADY OR FLASHING, 110-240VAC/DC AMBER	\$ 343.70
QDM-230V-BLUE		LED BEACON IP66, STEADY OR FLASHING, 110-240VAC/DC BLUE	\$ 343.70
QDM-230V-CLEAR		LED BEACON IP66, STEADY OR FLASHING, 110-240VAC/DC CLEAR	\$ 343.70
QDM-230V-GREEN		LED BEACON IP66, STEADY OR FLASHING, 110-240VAC/DC GREEN	\$ 343.70
QDM-230V-RED		LED BEACON IP66, STEADY OR FLASHING, 110-240VAC/DC RED	\$ 343.70
QDM-24V-AMBER		LED BEACON IP66, STEADY OR FLASHING, 24-48VAC/DC AMBER	\$ 343.70
QDM-24V-BLUE		LED BEACON IP66, STEADY OR FLASHING, 24-48VAC/DC BLUE	\$ 343.70
QDM-24V-CLEAR		LED BEACON IP66, STEADY OR FLASHING, 24-48VAC/DC CLEAR	\$ 343.70
QDM-24V-GREEN		LED BEACON IP66, STEADY OR FLASHING, 24-48VAC/DC GREEN	\$ 343.70
QDM-24V-RED		LED BEACON IP66, STEADY OR FLASHING, 24-48VAC/DC RED	\$ 343.70
QDM-24V-YELLOW	LED BEACON IP66, STEADY OR FLASHING, 24-48VAC/DC YELLOW	\$ 343.70	
QDL-230V-AMBER		LED BEACON IP66, STEADY OR FLASHING, 110-240VA/DC AMBER	\$ 827.50
QDL-230V-BLUE		LED BEACON IP66, STEADY OR FLASHING, 110-240VA/DC BLUE	\$ 938.60
QDL-230V-CLEAR		LED BEACON IP66, STEADY OR FLASHING, 110-240VA/DC CLEAR	\$ 827.50
QDL-230V-GREEN		LED BEACON IP66, STEADY OR FLASHING, 110-240VA/DC GREEN	\$ 938.60
QDL-230V-RED		LED BEACON IP66, STEADY OR FLASHING, 110-240VA/DC RED	\$ 827.50
QDL-24V-AMBER		LED BEACON IP66, STEADY OR FLASHING, 24-48VAC/DC AMBER	\$ 799.80
QDL-24V-BLUE		LED BEACON IP66, STEADY OR FLASHING, 24-48VAC/DC BLUE	\$ 874.00
QDL-24V-CLEAR		LED BEACON IP66, STEADY OR FLASHING, 24-48VAC/DC CLEAR	\$ 799.80
QDL-24V-GREEN		LED BEACON IP66, STEADY OR FLASHING, 24-48VAC/DC GREEN	\$ 874.00
QDL-24V-RED		LED BEACON IP66, STEADY OR FLASHING, 24-48VAC/DC RED	\$ 799.80
BRACKET-AB1		MOUNTING BRACKET SIZE 1 FOR QDS/ASS-T	\$ 74.00
BRACKET-AB2		MOUNTING BRACKET SIZE 2 FOR QDM/ASM	\$ 83.30
BRACKET-AB3		MOUNTING BRACKET SIZE 3 FOR QDL/ASL	\$ 138.90
BRACKET-AB4		MOUNTING BRACKET SIZE 4 FOR QBL/ASX	\$ 161.10
GASKET-AG1		GASKET IP66, SIZE 1, FOR QDS/ASS-T	\$ 29.10
GASKET-AG2		GASKET IP66, SIZE 2, FOR QDM/ASM	\$ 33.10
GASKET-AG3		GASKET IP66, SIZE 3, FOR QDL/ASL	\$ 39.00
GASKET-AG4		GASKET IP66, SIZE 1, FOR QDX/ASX	\$ 49.00
KIT-AMK		COUPLING, FOR JOINING QDS/M & ASS/M PAIRS	\$ 20.50

## Visual Alarms - LED Beacons


### J. Auer "R" Series High Performance LED Beacons

The new LED beacon high performance R series is the brightest LED beacon in its category and is specially designed for maximum signaling effect.


Diameter 110 mm. IP66 protection and impact resistance IK08, the R series is suitable for a wide range of applications. The multifunction beacon has 28 functions and 12 x 6 LEDs.

RDMHP-024-AMBER		LED BEACON, MULTIFUNCTION, HIGH PERFORMANCE, 24VAC/DC, AMBER	\$ 391.70
RDMHP-024-BLUE		LED BEACON, MULTIFUNCTION, HIGH PERFORMANCE, 24VAC/DC, BLUE	\$ 391.70
RDMHP-024-CLEAR		LED BEACON, MULTIFUNCTION, HIGH PERFORMANCE, 24VAC/DC, CLEAR	\$ 391.70
RDMHP-024-GREEN		LED BEACON, MULTIFUNCTION, HIGH PERFORMANCE, 24VAC/DC, GREEN	\$ 391.70
RDMHP-024-RED		LED BEACON, MULTIFUNCTION, HIGH PERFORMANCE, 24VAC/DC, RED	\$ 391.70
RDMHP-230-AMBER		LED BEACON, MULTIFUNCTION, HIGH PERFORMANCE, 110-230VAC, AMBER	\$ 388.60
RDMHP-230-BLUE		LED BEACON, MULTIFUNCTION, HIGH PERFORMANCE, 110-230VAC, BLUE	\$ 388.60
RDMHP-230-CLEAR		LED BEACON, MULTIFUNCTION, HIGH PERFORMANCE, 110-230VAC, CLEAR	\$ 388.60
RDMHP-230-GREEN		LED BEACON, MULTIFUNCTION, HIGH PERFORMANCE, 110-230VAC, GREEN	\$ 388.60
RDMHP-230-RED		LED BEACON, MULTIFUNCTION, HIGH PERFORMANCE, 110-230VAC, RED	\$ 388.60

## BASES

RBH		UNIVERSAL MOUNTING BASE FOR R-SERIES BEACONS	\$ 84.70
RBL		HORIZONTAL MOUNTING BASE FOR R-SERIES BEACONS	\$ 64.20

## BRACKETS

RWD		VERTICAL MOUNTING BRACKET FOR R-SERIES BEACONS	\$ 185.90
RWU		METAL MOUNTING BRACKET FOR R-SERIES BEACONS	\$ 74.20


## GASKETS

GASKET-RG1	GASKET, FLAT, FOR R SERIES BEACONS	\$ 21.00
GASKET-RG2	GASKET, WALL, FOR R SERIES BEACONS	\$ 15.40








## E-LITE LED Steady Beacons, IP66, 70mm Ø

E-LITE steady beacons are suitable for many 24Vdc signalling applications with pre-wired cable, protected to IP66

E-LITE-24V-AMBER		LED STEADY 24VDC BEACON (28252), 70mm DIA IP66, AMBER	\$ 68.10
E-LITE-24V-BLUE		LED STEADY 24VDC BEACON (28251), 70mm DIA IP66, BLUE	\$ 68.10
E-LITE-24V-CLEAR		LED STEADY 24VDC BEACON (28256), 70mm DIA IP66, CLEAR	\$ 68.10
E-LITE-24V-GREEN		LED STEADY 24VDC BEACON (28254), 70mm DIA IP66, GREEN	\$ 68.10
E-LITE-24V-RED		LED STEADY 24VDC BEACON (28253), 70mm DIA IP66, RED	\$ 68.10
E-LITE-24V-RGB-FL		LED FLASHING 24VDC BEACON (28324), 70mm DIA IP66, 7 COLOUR RGB	\$ 152.30
E-LITE-24V-RGB-STDY		LED STEADY 24VDC BEACON, 70mm DIA IP66, (28322), 7 COLOUR RGB	\$ 152.30
E-LITE-FLASHER		E-LITE FLASHER RELAY, 3 FUNCTIONS - 24VDC 100mA	\$ 64.70



## PCL LED Flashing/Steady Beacons

PCL Series IP67 LED flashing/steady beacon offering long life and low current consumption, 2Hz flash rate. Size 75mm dia x 55mm high. Surface mounted,


PCL-AMB-230V		LED BEACON STEADY OR FLASHING, 230/240VAC, AMBER	\$ 161.30
PCL-BLU-230V		LED BEACON STEADY OR FLASHING, 230/240VAC, BLUE	\$ 190.40
PCL-CLE-230V		LED BEACON STEADY OR FLASHING, 230/240VAC, CLEAR	\$ 161.30
PCL-GRN-230V		LED BEACON STEADY OR FLASHING, 230/240VAC, GREEN	\$ 190.40
PCL-RED-230V		LED BEACON STEADY OR FLASHING, 230/240VAC, RED	\$ 161.30
PCL-AMB-24V		LED BEACON STEADY OR FLASHING, 24V/AC/DC, AMBER	\$ 157.40
PCL-BLU-24V		LED BEACON STEADY OR FLASHING, 24V/AC/DC, BLUE	\$ 177.10
PCL-GRN-24V		LED BEACON STEADY OR FLASHING, 24V/AC/DC, GREEN	\$ 177.10
PCL-RED-24V		LED BEACON STEADY OR FLASHING, 24V/AC/DC, RED	\$ 157.40
PFL-AMB-230V		AMBER LED MULTISTROBE BEACON 230/240VAC	\$ 198.30
PMR-100		MOUNTING BASE 100mm ALI TUBE WITH PLASTIC FOOT FOR PCL	\$ 82.50
PMR-250		MOUNTING BASE 250mm ALI TUBE WITH PLASTIC FOOT FOR PCL	\$ 87.50
PVW-WALL		PCL WALL MOUNTING BASE	\$ 33.80
			

## OVOSMD LED BEACONS, IP65

Multifunction LED machine warning lights, available in 12-24Vac/dc or 90-240Vac, continuous or 3 different flash rates selectable by DIP switch, 100,000 hours life, high-intensity LED's and fresnel lens for greater visibility. IP65 rated, mounts through 22mm hole or surface mounting using TWS-AFF & either TWS-BS or TWS-KIT. Ø 76 x 69mm H.

OVOSMD-12-24/AM		OVOLUX LED MULTIFUNCTION BEACON (38782), 12-24VAC/DC AMBER	\$ 152.10
OVOSMD-12-24/BL		OVOLUX LED MULTIFUNCTION BEACON (38781), 12-24VAC/DC BLUE	\$ 152.10
OVOSMD-12-24/CL		OVOLUX LED MULTIFUNCTION BEACON (38786), 12-24VAC/DC, CLEAR	\$ 152.10
OVOSMD-12-24/GR		OVOLUX LED MULTIFUNCTION BEACON (38784), 12-24VAC/DC GREEN	\$ 152.10
OVOSMD-12-24/RD		OVOLUX LED MULTIFUNCTION BEACON (38783), 12-24VAC/DC RED	\$ 152.10
OVOSMD-12-24/YE		OVOLUX LED MULTIFUNCTION BEACON (38785), 12-24VAC/DC YELLOW	\$ 152.10
OVOSMD-240/AM		OVOLUX LED MULTIFUNCTION BEACON (38792), 90-240VAC, AMBER	\$ 178.50
OVOSMD-240/BL		OVOLUX LED MULTIFUNCTION BEACON (38791), 90-240VAC, BLUE	\$ 178.50
OVOSMD-240/CL		OVOLUX LED MULTIFUNCTION BEACON (38796), 90-240VAC, CLEAR	\$ 178.50
OVOSMD-240/GR		OVOLUX LED MULTIFUNCTION BEACON (38794), 90-240VAC, GREEN	\$ 178.50
OVOSMD-240/RD		OVOLUX LED MULTIFUNCTION BEACON (38793), 90-240VAC, RED	\$ 178.50
OVOSMD-240/YE		OVOLUX LED MULTIFUNCTION BEACON (38795), 90-240VAC, YELLOW	\$ 178.50
OVOPG9-12-24/AM		OVOPG9 LED MULTIFUNCTION BEACON, PG9 GLAND ENTRY, 12-24VAC/DC, AMBER	\$ 171.90
OVOPG9-12-24/BL		OVOPG9 LED MULTIFUNCTION BEACON, PG9 GLAND ENTRY, 12-24VAC/DC, BLUE	\$ 171.90
OVOPG9-12-24/GR		OVOPG9 LED MULTIFUNCTION BEACON, PG9 GLAND ENTRY, 12-24VAC/DC, GREEN	\$ 171.90
OVOPG9-12-24/RD		OVOPG9 LED MULTIFUNCTION BEACON, PG9 GLAND ENTRY, 12-24VAC/DC, RED	\$ 171.90
OVOPG9-240/AM		OVOPG9 LED MULTIFUNCTION BEACON, PG9 GLAND ENTRY, 240VAC, AMBER	\$ 195.60
OVOPG9-240/GR		OVOPG9 LED MULTIFUNCTION BEACON, PG9 GLAND ENTRY, 240VAC, GREEN	\$ 195.60
OVOPG9-240/RD		OVOPG9 LED MULTIFUNCTION BEACON, PG9 GLAND ENTRY, 240VAC, RED	\$ 195.60

## OVOLUX Mounting Accessories

TWS-AFF		TWS/OVOLUX BASE MOUNT COUPLER(27697)	\$ 19.80
TWS-BC		TWS TOWER SECTOR BASE & COVER (27700)	\$ 94.90
TWS-BP1		TWS/OVOLUX SINGLE WALL BRACKET (27762)	\$ 37.60
TWS-BP2		TWS/OVOLUX DOUBLE WALL BRACKET (27763)	\$ 37.60
TWS-BS		TWS/OVOLUX MOUNTING BASE UNIT (27760)	\$ 26.80
TWS-KIT		TWS/OVOLUX 100mm PLASTIC POLE MOUNTING KIT (27764)	\$ 39.40
TWS-KIT-L/100		TWS/OVOLUX 100mm S/S POLE MOUNTING KI T (27765)	\$ 84.70
TWS-KIT-L/200		TWS/OVOLUX 200mm S/S POLE MOUNTING KI T (27766)	\$ 99.20
TWS-KIT-L/400		TWS/OVOLUX 400mm S/S POLE MOUNTING KI T (27767)	\$ 131.10
TWS-PR		TWS EXTENSION STEM 100mm (27761)	\$ 18.80
OVOLUX-LENS-AMB		LENS FOR OVOLUX BEACON AMBER	\$ 26.80
OVOLUX-LENS-BLU		LENS FOR OVOLUX BEACON BLUE	\$ 26.80
OVOLUX-LENS-CLR		LENS FOR OVOLUX BEACON CLEAR	\$ 26.80
OVOLUX-LENS-GRN		LENS FOR OVOLUX BEACON GREEN	\$ 26.80
OVOLUX-LENS-RED		LENS FOR OVOLUX BEACON RED	\$ 26.80
OVOLUX-LENS-YEL	LENS FOR OVOLUX BEACON YELLOW	\$ 26.80	

## Visual Alarms - LED Beacons, LED Traffic Lights

### Sirena M-Line LED Multifunction Beacons

Superbright multifunction LED beacon with 3 separate functions (flashing, strobe, random), controllable independently via separate contacts. 92mm dia x 107mm high, IP66 rated, with versatile mounting options

FLR-AMBER	M-LINE MULTIFUNCTION BEACON, (90352) 12/24VAC/DC, AMBER	\$ 343.70
FLR-BLUE	M-LINE MULTIFUNCTION BEACON, (90351)12/24VAC/DC, BLUE	\$ 343.70
FLR-GREEN	M-LINE MULTIFUNCTION BEACON, (90354) 12/24VAC/DC, GREEN	\$ 343.70
FLR-RED	M-LINE MULTIFUNCTION BEACON (90353) 12/24VAC/DC, RED	\$ 343.70

SLR beacons also have a simulated rotating function

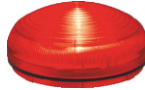
SLR-S-AMBER	M-LINE MULTIFUNCTION BEACON , (90852) 12/24VAC/DC, AMBER	\$ 343.70
SLR-S-BLUE	M-LINE MULTIFUNCTION BEACON , (90851) 12/24VAC/DC, BLUE	\$ 343.70
SLR-S-CLEAR	M-LINE MULTIFUNCTION BEACON , (90856) 12/24VAC/DC, CLEAR	\$ 343.70
SLR-S-GREEN	M-LINE MULTIFUNCTION BEACON , (90854) 12/24VAC/DC, GREEN	\$ 343.70
SLR-S-RED	M-LINE MULTIFUNCTION BEACON , (90853) 12/24VAC/DC, RED	\$ 343.70



### Sirena M-Line XLF LED Beacons

Multifunction beacon with Superbright LED for use with M-LINE and T-LINE bases. Flashing, strobe or steady function, controlled by independent connections. 92mm dia x 42mm high, IP66 rated, with versatile mounting options, including industrial traffic lights using the T-LINE bases

XLF-S-AMBER	MULTIFUNCTION LED BEACON 12-24VAC/DC AMBER	\$ 220.30
XLF-S-BLUE	MULTIFUNCTION LED BEACON 12-24VAC/DC BLUE	\$ 220.30
XLF-S-GREEN	MULTIFUNCTION LED BEACON 12-24VAC/DC GREEN	\$ 220.30
XLF-S-RED	MULTIFUNCTION LED BEACON 12-24VAC/DC RED	\$ 220.30



Multifunction LED beacon with 8 separate colours and 5 lighting effects, with 3 separate alarm stages controllable independently via separate connections 92mm dia x 42mm high, IP66 rated, with versatile mounting options

XLF-R/G/B	MULTICOLOUR MULTIFUNCTION LED BEACON IP65 (90156)	\$ 264.40
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Complete unit requires a choice of beacon and base (sold separately) - see accessories

### T-LINE Industrial Traffic Lights

A range of modular LED Industrial Traffic Lights designed for use with the Sirena M-LINE range of beacons. While the recommended beacon is the XLF-S range above, T-LINE bases will accept any of the M-LINE range for versatile modular use where applications require a variety of signals for different conditions. IP66 protected

T-LINE 2 BASE-12/24V	T-LINE TRAFFIC LIGHT BASE, 2 LIGHT 12-24VAC/DC	\$ 274.40
T-LINE 2 BASE-230V	T-LINE TRAFFIC LIGHT BASE, 2 LIGHT 120-240VAC	\$ 402.90
T-LINE 3 BASE-12/24V	T-LINE TRAFFIC LIGHT BASE, 3 LIGHT 12-24VAC/DC	\$ 371.40
T-LINE 3 BASE-230V	T-LINE TRAFFIC LIGHT BASE, 3 LIGHT 120-240VAC	\$ 528.80
T-LINE POLE ADAPTOR	POLE MTG ADAPTOR FOR T-LINE BASE	\$ 45.30
T-LINE VISOR	VISOR FOR T-LINE & M-LINE BASES39	\$ 49.10
T-LINE WALL BRACKET	STEEL WALL BRACKET FOR T-LINE 2 OR 3 LIGHT	\$ 46.60



T-LINE 2  
BASE WITH  
XLF BEACON

### Sirena M-Line Bases/Accessories

Bases to suit any application for M-Line Beacons and Sounders, available in Grey (except FLUSH model base) or White

M-LINE BASE 40-80V	M-LINE DEEP BASE (90432), 40-80VAC/DC GREY	\$ 126.90
M-LINE BASE-230V	M-LINE DEEP BASE (90369), 120/240VAC GREY	\$ 126.90
M-LINE BASE-230V-BLK	M-LINE DEEP BASE (90458), 120/240VAC BLACK	\$ 126.90
M-LINE BASE-230V-RED	M-LINE DEEP BASE (90508), 120/240VAC RED	\$ 126.90
M-LINE BASE-230V-WH	M-LINE DEEP BASE (90509), 120/240VAC WHITE	\$ 126.90
M-LINE BASE-DEEP	M-LINE DEEP BASE (90368), 12-24VAC/DC GREY	\$ 26.40
M-LINE BASE-DEEP-BLK	M-LINE DEEP BASE (90452), 12-24VAC/DC BLACK	\$ 26.40
M-LINE BASE-DEEP-RED	M-LINE DEEP BASE (90345), 12-24VAC/DC RED	\$ 26.40
M-LINE BASE-DEEP-WH	M-LINE DEEP BASE (90346), 12-24VAC/DC WHITE	\$ 26.40
M-LINE BASE-SH	M-LINE SHALLOW BASE (90367), 12-24VAC/DC GREY	\$ 26.40
M-LINE BASE-SH-BLK	M-LINE SHALLOW BASE (90451), 12-24VAC/DC BLACK	\$ 26.40
M-LINE BASE-SH-RED	M-LINE SHALLOW BASE (90343), 12-24VAC/DC RED	\$ 26.40
M-LINE BASE-SH-WH	M-LINE SHALLOW BASE (90344), 12-24VAC/DC WHITE	\$ 26.40
M-LINE DBL-12/24V	M-LINE DOUBLE WALL MOUNT BASE (90372), 12-24VAC/DC GREY	\$ 46.30
M-LINE DBL-12/24V-BL	M-LINE DOUBLE WALL MOUNT BASE (90454), 12-24VAC/DC BLACK	\$ 46.30
M-LINE DBL-12/24V-WH	M-LINE DOUBLE WALL MOUNT BASE (90374), 12-24VAC/DC WHITE	\$ 46.30
M-LINE DBL-230V	M-LINE DOUBLE WALL MOUNT BASE (90512), 120/240VAC GREY	\$ 171.90
M-LINE DBL-230V-WH	M-LINE DOUBLE WALL MOUNT BASE (90514), 120/240VAC WHITE	\$ 171.90
M-LINE FLUSH-12/24-W	M-LINE FLUSH MOUNT BASE (90375), 12/24VAC/DC WHITE	\$ 42.30
M-LINE FLUSH-230V-WH	M-LINE FLUSH MOUNT BASE (90376), 120/240VAC WHITE	\$ 148.10
M-LINE POLE-12/24V	M-LINE POLE MOUNT BASE (90610), 12-24VAC/DC GREY	\$ 33.10
M-LINE POLE-230V	M-LINE POLE MOUNT BASE (90612)120/240VAC GREY	\$ 146.00
M-LINE WALL-12/24V	M-LINE WALL MOUNT BASE (90370), 12-24VAC/DC GREY	\$ 33.10
M-LINE WALL-12/24V-R	M-LINE WALL MOUNT BASE (90347), 12-24VAC/DC RED	\$ 33.10
M-LINE WALL-12/24V-W	M-LINE WALL MOUNT BASE (90348), 12-24VAC/DC WHITE	\$ 33.10
M-LINE WALL-230V	M-LINE WALL MOUNT BASE (90371), 120/240VAC GREY	\$ 143.00
M-LINE WALL-230V-WH	M-LINE WALL MOUNT BASE (90511), 120/240VAC WHITE	\$ 143.00
M-LINE COLLAR IP69K	IP69K COLLAR FOR M-LINE MODULES (72248)	\$ 9.80



DEEP BASE




CAGE

M-LINE CAGE SIZE 1	HEAVY DUTY STAINLESS STEEL CAGE(90551) SIZE 1	\$ 119.00
M-LINE CAGE SIZE 2	HEAVY DUTY STAINLESS STEEL CAGE (90552) SIZE 2	\$ 124.30
M-LINE CAGE SIZE 3	HEAVY DUTY STAINLESS STEEL CAGE (90553)SIZE 3	\$ 144.20
M-LINE CAGE SIZE 4	HEAVY DUTY STAINLESS STEEL CAGE (90554) SIZE 4	\$ 148.10
M-LINE-PNP-24VDC	M-LINE PNP DRIVE ADAPTOR 24VDC SUPPLY	\$ 128.50


## Miniflash FLR LED Multifunction Beacons

Superbright multifunction LED beacon with 3 separate functions (steady, flashing, rotating), controllable independently via separate contacts. 110mm dia x 146mm high, IP54 rated

MINIFLASH-FLR-024-AM		LED MULTIFUNCTION BEACON 12-24VAC/DC, (66502), AMBER	\$ 487.90
MINIFLASH-FLR-024-BL		LED MULTIFUNCTION BEACON 12-24VAC/DC, (66501), BLUE	\$ 487.90
MINIFLASH-FLR-024-CL		LED MULTIFUNCTION BEACON 12-24VAC/DC, (66506), CLEAR	\$ 487.90
MINIFLASH-FLR-024-GR		LED MULTIFUNCTION BEACON 12-24VAC/DC, (66504), GREEN	\$ 487.90
MINIFLASH-FLR-024-RD		LED MULTIFUNCTION BEACON 12-24VAC/DC, (66503), RED	\$ 487.90
MINIFLASH-FLR-230-AM		LED MULTIFUNCTION BEACON 90-240VAC, (66512), AMBER	\$ 487.90
MINIFLASH-FLR-230-BL		LED MULTIFUNCTION BEACON 90-240VAC, (66511), BLUE	\$ 487.90
MINIFLASH-FLR-230-CL		LED MULTIFUNCTION BEACON 90-240VAC, (66516), CLEAR	\$ 487.90
MINIFLASH-FLR-230-GR		LED MULTIFUNCTION BEACON 90-240VAC, (66514), GREEN	\$ 487.90
MINIFLASH-FLR-230-RD		LED MULTIFUNCTION BEACON 90-240VAC, (66513), RED	\$ 487.90

### Rotallarm LED Rotating Beacons


Large multifunctional LED beacon with steady, flashing and rotating light effects controllable via independent electrical contacts, 212mm high x 168mm diameter, IP65 protected

ROTALLARM-LED-024/AM		LED BEACON, MULTIFUNCTION, 12-24VAC/DC, (90062), AMBER	\$ 423.00
ROTALLARM-LED-024/BL		LED BEACON, MULTIFUNCTION, 12-24VAC/DC, (90061), BLUE	\$ 423.00
ROTALLARM-LED-024/GR		LED BEACON, MULTIFUNCTION, 12-24VAC/DC, (90064), GREEN	\$ 423.00
ROTALLARM-LED-024/RD		LED BEACON, MULTIFUNCTION, 12-24VAC/DC, (90063), RED	\$ 423.00
ROTALLARM-LED-240/AM		LED BEACON, MULTIFUNCTION, 90-240VAC, (90082), AMBER	\$ 555.20
ROTALLARM-LED-240/BL		LED BEACON, MULTIFUNCTION, 90-240VAC, (90081), BLUE	\$ 555.20
ROTALLARM-LED-240/GR		LED BEACON, MULTIFUNCTION, 90-240VAC, (90084), GREEN	\$ 555.20
ROTALLARM-LED-240/RD		LED BEACON, MULTIFUNCTION, 90-240VAC, (90083), RED	\$ 555.20

### Visual Alarms - Rotating Beacons


#### Sirena Type 200 Rotating Beacons

Flat base rotating beacon with 55W H1 halogen lamp, 200mm x 165mm Ø, IP55, available with red, orange, blue, green or clear high-impact polycarbonate lens

TYPE200-012-AMBER		ROTATING BEACON 12VAC/DC AMBER	\$ 383.40
TYPE200-012-BLUE		ROTATING BEACON 12VAC/DC BLUE	\$ 383.40
TYPE200-012-CLEAR		ROTATING BEACON 12VAC/DC CLEAR	\$ 383.40
TYPE200-012-GREEN		ROTATING BEACON 12VAC/DC GREEN	\$ 383.40
TYPE200-012-RED		ROTATING BEACON 12VAC/DC RED	\$ 383.40
TYPE200-024-AMBER		ROTATING BEACON 24VAC/DC AMBER	\$ 383.40
TYPE200-024-BLUE		ROTATING BEACON 24VAC/DC BLUE	\$ 383.40
TYPE200-024-CLEAR		ROTATING BEACON 24VAC/DC CLEAR	\$ 383.40
TYPE200-024-GREEN		ROTATING BEACON 24VAC/DC GREEN	\$ 383.40
TYPE200-024-RED		ROTATING BEACON 24VAC/DC RED (26363)	\$ 383.40
TYPE200-110-AMBER		ROTATING BEACON 110VAC AMBER	\$ 449.40
TYPE200-110-BLUE		ROTATING BEACON 110VAC BLUE	\$ 449.40
TYPE200-110-CLEAR		ROTATING BEACON 110VAC CLEAR	\$ 449.40
TYPE200-110-GREEN		ROTATING BEACON 110VAC GREEN	\$ 449.40
TYPE200-110-RED		ROTATING BEACON 110VAC RED	\$ 449.40
TYPE200-240-AMBER		ROTATING BEACON 240VAC AMBER (26392)	\$ 449.40
TYPE200-240-BLUE		ROTATING BEACON 240VAC BLUE	\$ 449.40
TYPE200-240-CLEAR		ROTATING BEACON 240VAC CLEAR	\$ 449.40
TYPE200-240-GREEN	ROTATING BEACON 240VAC GREEN	\$ 449.40	
TYPE200-240-RED	ROTATING BEACON 240VAC RED	\$ 449.40	
TYPE200-AMB-LENS	LENS, TYPE 200 BEACON, AMBER	\$ 59.60	
TYPE200-BLUE-LENS	LENS, TYPE 200 BEACON, BLUE	\$ 59.60	
TYPE200-CLEAR-LENS	LENS, TYPE 200 BEACON, CLEAR	\$ 59.60	
TYPE200-GREEN-LENS	LENS, TYPE 200 BEACON, GREEN	\$ 59.60	
TYPE200-RED-LENS	LENS, TYPE 200 BEACON, RED	\$ 59.60	
PGLAMP-12V		HALOGEN LAMP, 12V 55W FOR 12/110/230V PG	\$ 36.40
PGLAMP-24V		HALOGEN LAMP, 24V 70W FOR 24V PG SERIES	\$ 65.70

## QLIGHT LED Rotating Mirror Beacons

Qlight range of heavy duty IP66 LED light source rotating mirror beacons with cast Aluminium housing and polycarbonate lens, inclusive of stainless steel wire cage.


QL-SH2TLRP-220-A		LED ROTATING BEACON WITH WIRE CAGE, 230VAC, AMBER	\$ 450.50
QL-SH2TLRP-220-R		LED ROTATING BEACON WITH WIRE CAGE, 230VAC, RED	\$ 450.50
QL-SH2TLRP-24-A		LED ROTATING BEACON WITH WIRE CAGE, 24VDC, AMBER	\$ 415.00
QL-SH2TLRP-24-B		LED ROTATING BEACON WITH WIRE CAGE, 24VDC, BLUE	\$ 415.00
QL-SH2TLRP-24-R		LED ROTATING BEACON WITH WIRE CAGE, 24VDC, RED	\$ 415.00

### Automotive/Transport Beacons

Rotating beacons designed to stand up to the rigours of use on automotive and agricultural vehicles and machinery, with impact-resistant lenses and fibreglass reinforced polyamide bases. Magnetic, suction cup or pole mounted options, halogen lamp-powered (55W), IP55 rated


MICROBOULE-1M-12V		ROTATING BEACON ,12VDC 55W, MAGNETIC MOUNTING (74760) AMBER	\$ 208.90
MICROBOULE-1MV-12V		ROTATING BEACON, 24VDC 70W, MAGNETIC MOUNTING, (74761) AMBER	\$ 232.60
MICROBOULE-1MV-24V		ROTATING BEACON, 12VDC 55W ,FLEX MOUNTING, (74559) AMBER	\$ 140.10
MICROBOULE-FLEX-12V		ROTATING BEACON ,24VDC 70W, FLEX MOUNTING, (74560) AMBER	\$ 163.90
MICROBOULE-FLEX-24V			
MICROBOULE-LAMP-12V		HALOGEN LAMP, 12V/35W H1, FOR MICROBOULE (72759)	\$ 25.80
MICROBOULE-LAMP-24V		HALOGEN LAMP, 24V/35W H1, FOR MICROBOULE (72760)	\$ 25.80

### Adaptors & Connectors

MB-ADAPTOR-B		MICROBOULE ADAPTOR - HORIZONTAL MOUNTING	\$ 23.80
MB-ADAPTOR-FZ		MICROBOULE ADAPTOR - THREADED	\$ 26.40
MB-ADAPTOR-S		MICROBOULE ADAPTOR FOR WELDING	\$ 19.90
MB-ADAPTOR-SPL/D		MICROBOULE ADAPTOR - VERTICAL MOUNTING	\$ 106.10
MB-CAB-SAC		POWER ADAPTOR WITH FLAT CABLE	\$ 46.30
MB-CSP-SAC		POWER ADAPTOR WITH 4.5M CURLY CORD	\$ 63.50
MB-SAC		POWER ADAPTOR-CIGARETTE LIGHTER	\$ 21.10

ADAPTOR- B


### Crystal 8 LED Beacons for Vehicles

CRYSTAL-LED-A-AMBER		LED BEACON, 12-24VDC POLE MOUNTING, (36440) AMBER	\$ 442.90
CRYSTAL-LED-A-RED		LED BEACON, 12-24VDC POLE MOUNTING, (36457) RED	\$ 442.90
CRYSTAL-LED-B-AMBER		LED BEACON, 12-24VDC BASE MOUNTING, (36417) AMBER	\$ 409.80
CRYSTAL-LED-B-RED		LED BEACON, 12-24VDC BASE MOUNTING, (36386) RED	\$ 390.30
CRYSTAL-LED-M-AMBER		LED BEACON 12-24VDC MAGNETIC BASE, (36437) AMBER	\$ 465.30
CRYSTAL-LED-M-RED		LED BEACON 12-24VDC MAGNETIC BASE, (36396) RED	\$ 465.30

### Visual/Audible Alarms

#### Sirena M-Line SIR-E LED Beacon/Sounder combination

Combination LED beacon/sounder offering 2 light effects (steady, flashing) and 64 different tones, with volume control to 65dB min. Allows 3 separate alarm levels (warning, alarm 1, alarm 2) via separate contacts. 92mm dia x 62mm high, IP66 rated, with versatile mounting options

SIR-E LED/AMBER		LED BEACON/SOUNDER, (90362),105dB, 12/24VAC/DC, AMBER	\$ 259.10
SIR-E LED/BLUE		LED BEACON/SOUNDER, (90361),105dB,12/24VAC/DC, BLUE	\$ 259.10
SIR-E LED/GREEN		LED BEACON/SOUNDER, (90364),105dB,12/24VAC/DC, GREEN	\$ 259.10
SIR-E LED/RED		LED BEACON/SOUNDER, (90363),105dB,12/24VAC/DC, RED	\$ 259.10
SIR-E MAX LED/AMB		LED BEACON/SOUNDER, (90562), HIGH OUTPUT, 4 FUNCTIONS 115dB, 12/24VAC/DC , AMBER	\$ 470.60
SIR-E MAX LED/GREEN		LED BEACON/SOUNDER, (90564), HIGH OUTPUT, 4 FUNCTIONS 115dB, 12/24VAC/DC, GREEN	\$ 470.60
SIR-E MAX LED/RED		LED BEACON/SOUNDER, (90563), HIGH OUTPUT, 4 FUNCTIONS 115dB, 12/24VAC/DC, RED	\$ 470.60

Complete unit requires a choice of beacon/sounder and base (sold separately)



## Sirena M-Line Bases/Accessories

Bases to suit any application for M-Line Beacons and Sounders, available in Grey (except FLUSH model base) or White

M-LINE BASE 40-80V	M-LINE DEEP BASE (90432), 40-80VAC/DC GREY	\$ 126.90
M-LINE BASE-230V	M-LINE DEEP BASE (90369), 120/240VAC GREY	\$ 126.90
M-LINE BASE-230V-BLK	M-LINE DEEP BASE (90458), 120/240VAC BLACK	\$ 126.90
M-LINE BASE-230V-RED	M-LINE DEEP BASE (90508), 120/240VAC RED	\$ 126.90
M-LINE BASE-230V-WH	M-LINE DEEP BASE (90509), 120/240VAC WHITE	\$ 126.90
M-LINE BASE-DEEP	M-LINE DEEP BASE (90368), 12-24VAC/DC GREY	\$ 26.40
M-LINE BASE-DEEP-BLK	M-LINE DEEP BASE (90452), 12-24VAC/DC BLACK	\$ 26.40
M-LINE BASE-DEEP-RED	M-LINE DEEP BASE (90345), 12-24VAC/DC RED	\$ 26.40
M-LINE BASE-DEEP-WH	M-LINE DEEP BASE (90346), 12-24VAC/DC WHITE	\$ 26.40
M-LINE BASE-SH	M-LINE SHALLOW BASE (90367), 12-24VAC/DC GREY	\$ 26.40
M-LINE BASE-SH-BLK	M-LINE SHALLOW BASE (90451), 12-24VAC/DC BLACK	\$ 26.40
M-LINE BASE-SH-RED	M-LINE SHALLOW BASE (90343), 12-24VAC/DC RED	\$ 26.40
M-LINE BASE-SH-WH	M-LINE SHALLOW BASE (90344), 12-24VAC/DC WHITE	\$ 26.40



DEEP BASE

M-LINE DBL-12/24V	M-LINE DOUBLE WALL MOUNT BASE (90372), 12-24VAC/DC GREY	\$ 46.30
M-LINE DBL-12/24V-BL	M-LINE DOUBLE WALL MOUNT BASE (90454), 12-24VAC/DC BLACK	\$ 46.30
M-LINE DBL-12/24V-WH	M-LINE DOUBLE WALL MOUNT BASE (90374), 12-24VAC/DC WHITE	\$ 46.30
M-LINE DBL-230V	M-LINE DOUBLE WALL MOUNT BASE (90512), 120/240VAC GREY	\$ 171.90
M-LINE DBL-230V-WH	M-LINE DOUBLE WALL MOUNT BASE (90514), 120/240VAC WHITE	\$ 171.90
M-LINE FLUSH-12/24-W	M-LINE FLUSH MOUNT BASE (90375), 12/24VAC/DC WHITE	\$ 42.30
M-LINE FLUSH-230V-WH	M-LINE FLUSH MOUNT BASE (90376), 120/240VAC WHITE	\$ 148.10
M-LINE POLE-12/24V	M-LINE POLE MOUNT BASE (90610), 12-24VAC/DC GREY	\$ 33.10
M-LINE POLE-230V	M-LINE POLE MOUNT BASE (90612)/120/240VAC GREY	\$ 146.00
M-LINE WALL-12/24V	M-LINE WALL MOUNT BASE (90370), 12-24VAC/DC GREY	\$ 33.10
M-LINE WALL-12/24V-R	M-LINE WALL MOUNT BASE (90347), 12-24VAC/DC RED	\$ 33.10
M-LINE WALL-12/24V-W	M-LINE WALL MOUNT BASE (90348), 12-24VAC/DC WHITE	\$ 33.10
M-LINE WALL-230V	M-LINE WALL MOUNT BASE (90371), 120/240VAC GREY	\$ 143.00
M-LINE WALL-230V-WH	M-LINE WALL MOUNT BASE (90511), 120/240VAC WHITE	\$ 143.00

M-LINE COLLAR IP69K	IP69K COLLAR FOR M-LINE MODULES (72248)	\$ 9.80
M-LINE CAGE SIZE 1	HEAVY DUTY STAINLESS STEEL CAGE(90551) SIZE 1	\$ 119.00
M-LINE CAGE SIZE 2	HEAVY DUTY STAINLESS STEEL CAGE (90552) SIZE 2	\$ 124.30
M-LINE CAGE SIZE 3	HEAVY DUTY STAINLESS STEEL CAGE (90553)SIZE 3	\$ 144.20
M-LINE CAGE SIZE 4	HEAVY DUTY STAINLESS STEEL CAGE (90554) SIZE 4	\$ 148.10
M-LINE-PNP-24VDC	M-LINE PNP DRIVE ADAPTOR 24VDC SUPPLY	\$ 128.50



CAGE

### SIR Touch LED Beacon/Sounder combo

SIR-TOUCH/LED-024	ACOUSTIC SOUNDER WITH LED BEACON, (90752),120dB,12/24VAC/DC	\$ 818.30
SIR-TOUCH/LED-230	ACOUSTIC SOUNDER WITH LED BEACON, (90753),120dB, 85-265VAC	\$ 868.70
SIR-TOUCH-024	SOUNDER, 64 TONES, MULTIFUNCTION, (90750), 120dB, 12/24VAC/DC	\$ 711.30
SIR-TOUCH-230	SOUNDER, 64 TONES, MULTIFUNCTION, (90751), 120dB, 85-265AC	\$ 754.10
SIR-TOUCH-SEP	SEP BRACKET FOR SIR-TOUCH RANGE	\$ 69.30
SIR-TOUCH-WALL	WALL MOUNTING BRACKET, (90754), FOR SIR-TOUCH SOUNDER	\$ 70.50



### Flashni Xenon Strobe / Sounder Combination

Combination Xenon flasher 0.7J energy@1Hz flash rate and Roshni sounder 101dB, 18-30Vdc, 68mA@24Vdc. Available with amber, blue, green, red or white lens. IP54 protection with shallow base (standard), IP65 with deep base option. 93mm dia x 92 mm high with shallow base. In addition they can be powered from 110Vac or 230Vac by using a Deep Powered Base that incorporates a 100mA 24Vdc power supply

FLASHNI-FL-BL-W-S	SOUNDER/BEACON 18-30VDC WHITE BASE, BLUE LENS	\$ 367.50
FLASHNI-FL-GL-W-S	SOUNDER/BEACON 18-30VDC WHITE BASE, GREEN LENS	\$ 367.50
FLASHNI-FL-RL-R-S	SOUNDER/BEACON 18-30VDC RED BASE, RED LENS	\$ 367.50
FLASHNI-FL-RL-W-S	SOUNDER/BEACON 18-30VDC WHITE BASE, RED LENS	\$ 367.50
FLASHNISEP-FL-AL-R-D	SOUNDER/BEACON 18-30VDC, SEPARATELY SWITCHED, RED BASE, AMBER LENS	\$ 367.50
FLASHNISEP-FL-CL-W-S	SOUNDER/BEACON 18-30VDC, SEPARATELY SWITCHED, WHITE BASE, CLEAR LENS	\$ 367.50
FLASHNISEP-FL-RL-R-D	SOUNDER/BEACON 18-30VDC, SEPARATELY SWITCHED, RED BASE, RED LENS	\$ 367.50
FLASHNISEP-FL-RL-W-D	SOUNDER/BEACON 18-30VDC, SEPARATELY SWITCHED, WHITE BASE, RED LENS	\$ 367.50



FLASHNISEP model strobe/sounder units feature separate terminals for independent operation of the sounder and beacon functions

### ROLP/Solista MAXI LED Beacon/Sounder Combination

A combination unit utilising the SOLISTA Maxi LED beacon and the Roshni ROLP 32 tone, two stage, low profile, 101dB sounder with 20dB volume control. The LED beacon has a 0.5Cd light output, flash rate 1Hz. Units are supplied standard as IP54 with a shallow base. IP65 can be provided by using a deep base. In addition they can be powered from 110Vac or 230Vac by using a Deep Powered Base that incorporates a 100mA 24Vdc power supply

ROLP-MAXI-SOLISTA	RED LED BEACON & SOUNDER 9-28Vdc	\$ 216.80
BASE-DEEP-RED	FULLEON SOUNDER/BEACON BASE, 50x93mm, RED	\$ 23.80
BASE-DEEP-PWD-RED	FULLEON POWERED BASE, 50x93mm, INPUT 110-240VAC - OUT 24VDC 100mA, RED	\$ 58.20



### Roshni ROLP/Solex Xenon Strobe-Sounder Combination

An IP65 combination unit utilising the SOLEX 2J Xenon strobe and the Roshni ROLP 32 tone, two stage, low profile, 101dB sounder with 20dB volume cut via DIP switch. Conduit entries at each end. Available in 10-30Vdc or 86-264Vac versions. IP65 protected, available lens colours are amber, blue, green or red


ROSHNI-ROLP-SOA-024	SOUNDER/STROBE COMBO, IP65, 24VDC, AMBER	\$ 383.40
ROSHNI-ROLP-SOA-230	SOUNDER/STROBE COMBO, IP65, 84-265VAC, AMBER	\$ 453.50
ROSHNI-ROLP-SOB-024	SOUNDER/STROBE COMBO, IP65, 24VDC, BLUE	\$ 383.40
ROSHNI-ROLP-SOB-230	SOUNDER/STROBE COMBO, IP65, 84-265VAC, BLUE	\$ 453.50
ROSHNI-ROLP-SOG-024	SOUNDER/STROBE COMBO, IP65, 24VDC, GREEN	\$ 383.40
ROSHNI-ROLP-SOG-230	SOUNDER/STROBE COMBO, IP65, 84-265VAC, GREEN	\$ 453.50
ROSHNI-ROLP-SOR-024	SOUNDER/STROBE COMBO, IP65, 24VDC, RED	\$ 382.40
ROSHNI-ROLP-SOR-230	SOUNDER/STROBE COMBO, IP65, 84-265VAC, RED	\$ 453.50





## Q-LIGHT - QWCD Series Multi-tone and MP3 LED Beacon/Sounder Combinations

A new concept combination unit using the horn cover as a light box. The range has two models : the basic model with 31 built-in sounds, and an external sound (MP3) type model. There are 7 different playback functions, up to 31 mp3 files can be saved on a separate SD card. Available lens colours are amber, blue, green or red. IP66 protected. 115dB and 123dB versions


QL-QWCD35-24V-A		SOUNDER-LED BEACON, 12/24VDC, 115Db, 31 SOUNDS, AMBER	\$ 513.70
QL-QWCD35-24V-R		SOUNDER-LED BEACON, 12/24VDC, 115Db, 31 SOUNDS, RED	\$ 513.70
QL-QWCD35SD(T) 24V-B		SOUNDER-LED BEACON, TERMINAL BOX TYPE, 12//24VDC, 118DB, MP3 + 31 SOUNDS, BLUE	\$ 971.00
QL-QWCD35SD-24V-A		SOUNDER/LED BEACON, 12/24VDC, 113Db, MP3 + 31 SOUNDS, AMBER	\$ 886.30
QL-QWCD35SD-24V-B		SOUNDER/LED BEACON, 12/24VDC, 113Db, MP3 + 31 SOUNDS, BLUE	\$ 886.30
QL-QWCD35SD-24V-R		SOUNDER/LED BEACON, 12/24VDC, 113Db, MP3 + 31 SOUNDS, RED	\$ 886.30
QL-QWCD50-220V-R		SOUNDER/LED BEACON, 110/220VAC, 123Db, 31 SOUNDS, RED	\$ 1,185.50
QL-QWCD50SD-220V-A		SOUNDER/LED BEACON, 110/220VAC, 118DB, MP3 + 31 SOUNDS, AMBER	\$ 1,450.80
QL-QWCD50SD-220V-B		SOUNDER/LED BEACON, 110/220VAC, 118DB, MP3 + 31 SOUNDS, BLUE	\$ 1,450.80
QL-QWCD50SD-24V-A		SOUNDER/LED BEACON, 12//24VDC, 118DB, MP3 + 31 SOUNDS, AMBER	\$ 1,332.30
QL-QWCD50SD-24V-B		SOUNDER/LED BEACON, 12//24VDC, 118DB, MP3 + 31 SOUNDS, BLUE	\$ 1,332.30
QL-QWCD50SD-24V-R		SOUNDER/LED BEACON, 12//24VDC, 118DB, MP3 + 31 SOUNDS, RED	\$ 1,332.30

Other colours and voltages available on indent request

### Visual/Audible Alarms

#### QDS-ASS-T - LED Beacon/sounder Combination





94mm cubic design multi-tone alarm sounder and LED steady/flashing beacon. IP66, 32 tone options, 3 tones can be switched externally

QDS/ASST-024-AMB		LED BEACON-SOUNDER IP66, STEADY OR FLASHING, 24VAC/DC AMBER	\$ 557.80
QDS/ASST-024-RED		LED BEACON-SOUNDER IP66, STEADY OR FLASHING, 24VAC/DC, RED	\$ 557.80
QDS/ASST-230-AMB		LED BEACON-SOUNDER IP66, STEADY OR FLASHING, 230VAC, AMBER	\$ 670.10
QDS/ASST-230-RED		LED BEACON-SOUNDER IP66, STEADY OR FLASHING, 230VAC, RED	\$ 670.10

Other beacon colours and voltages on request



### Panel Mounted Flashers/Buzzers

Panel mount (22mm hole) IP65, flashers and buzzer/flashers, adjustable volume on buzzers

ELM-AMB-12V		BUZZER/BEACON, PANEL MOUNT, Ø 45mm, 98dB, 12VAC/DC, AMBER	\$ 256.10
ELM-AMB-240V		BUZZER/BEACON, PANEL MOUNT, Ø 45mm, 98dB, 240VAC, AMBER	\$ 284.80
ELM-AMB-24V		BUZZER/BEACON, PANEL MOUNT, Ø 45mm, 98dB, 24VAC/DC, AMBER	\$ 256.10
ELM-RED-12V		BUZZER/BEACON, PANEL MOUNT, Ø 45mm, 98dB, 12VAC/DC, RED	\$ 256.10
ELM-RED-240V		BUZZER/BEACON, PANEL MOUNT, Ø 45mm, 98dB, 240VAC, RED	\$ 284.80
ELM-RED-24V		BUZZER/BEACON, PANEL MOUNT, Ø 45mm, 98dB, 24VAC/DC, RED	\$ 256.10
ELG-AMB-12V		BUZZER/BEACON, PANEL MOUNT, Ø 65mm, 103dB, 12VAC/DC, AMBER	\$ 322.40
ELG-AMB-240V		BUZZER/BEACON, PANEL MOUNT, Ø 65mm, 103dB, 240VAC, AMBER	\$ 356.40
ELG-AMB-24V		BUZZER/BEACON, PANEL MOUNT, Ø 65mm, 103dB, 24VAC/DC, AMBER	\$ 322.40
ELG-RED-12V		BUZZER/BEACON, PANEL MOUNT, Ø 65mm, 103dB, 12VAC/DC, RED	\$ 322.40
ELG-RED-240V	BUZZER/BEACON, PANEL MOUNT, Ø 65mm, 103dB, 240VAC, RED	\$ 356.40	
ELG-RED-24V	BUZZER/BEACON, PANEL MOUNT, Ø 65mm, 103dB, 24VAC/DC, RED	\$ 322.40	
IBM-AMB-12V		LED BEACON, PANEL MOUNT, Ø 45mm, 12VAC/DC, AMBER	\$ 197.00
IBM-AMB-240V		LED BEACON, PANEL MOUNT, Ø 45mm, 240VAC, AMBER	\$ 197.00
IBM-AMB-24V		LED BEACON, PANEL MOUNT, Ø 45mm, 24VAC/DC, AMBER	\$ 197.00
IBM-BLU-240V		LED BEACON, PANEL MOUNT, Ø 45mm, 240VAC, BLUE	\$ 197.00
IBM-BLU-24V		LED BEACON, PANEL MOUNT, Ø 45mm, 24VAC/DC, BLUE	\$ 197.00
IBM-GRN-12V		LED BEACON, PANEL MOUNT, Ø 45mm, 12VAC/DC, GREEN	\$ 286.50
IBM-GRN-240V		LED BEACON, PANEL MOUNT, Ø 45mm, 240VAC, GREEN	\$ 286.50
IBM-GRN-24V		LED BEACON, PANEL MOUNT, Ø 45mm, 24VAC/DC, GREEN	\$ 286.50
IBM-RED-12V		LED BEACON, PANEL MOUNT, Ø 45mm, 12VAC/DC, RED	\$ 197.00
IBM-RED-240V		LED BEACON, PANEL MOUNT, Ø 45mm, 240VAC, RED	\$ 197.00
IBM-RED-24V		LED BEACON, PANEL MOUNT, Ø 45mm, 24VAC/DC, RED	\$ 197.00
ITL-230V			LED BEACON, 2-COLOUR PANEL MOUNT, Ø 65mm, 230VAC, RED/GREEN
ITL-24V	LED BEACON, 2-COLOUR PANEL MOUNT, Ø 65mm, 24VAC/DC, RED/GREEN		\$ 259.70
ITM-230V	LED BEACON, 2-COLOUR PANEL MOUNT, Ø 45mm, 230VAC, RED/GREEN		\$ 223.80
ITM-24V	LED BEACON, 2-COLOUR PANEL MOUNT, Ø 45mm, 24VAC/DC, RED/GREEN		\$ 223.80
ISL-AMB-12/24V		XENON STROBE BEACON, M22 PANEL MOUNT, Ø 65mm, 12-24VAC/DC, AMBER	\$ 277.60
ISL-AMB-230V		XENON STROBE BEACON, M22 PANEL MOUNT, Ø 65mm, 240VAC, AMBER	\$ 224.00
ISL-RED-12/24V		XENON STROBE BEACON, M22 PANEL MOUNT, Ø 65mm, 12-24VAC/DC, RED	\$ 277.60
ISL-RED-230V		XENON STROBE BEACON, M22 PANEL MOUNT, Ø 65mm, 240VAC, RED	\$ 224.00
PANEL-ADAPT		PANEL MOUNT ADAPTOR, M30 TO M22	\$ 32.80


## Sirena P40 Series Panel Mounted Beacons/Buzzers

The P40 series of panel mount 40mm dia (30mm hole) beacons/buzzers offer multifunction LED steady/flashing beacons in red, amber or green lens colours with 3 levels of alarm (steady, flashing, strobe). Also in the range are multicolour LED (R/G/A) 3-level warning beacons, 3-level LED flasher/sounder combo units, and 2-level piezoelectric sounder. All alarm stages are controllable via independent contacts, and wide voltage inputs of 12-24Vac/dc and 48-240Vac make this one of the most unique and versatile ranges of small warning devices available. All units are 41mm diameter and protected to a minimum standard of IP65.

P40-A/024		PIEZO SOUNDER, (91177), M30 PANEL MOUNT, 2-STAGE, Ø 40mm, 85dB, 12-24VAC/DC	\$ 104.50
P40-A/230		PIEZO SOUNDER, (91179), M30 PANEL MOUNT, 2-STAGE, Ø 40mm, 85dB, 48-240VAC	\$ 138.90
P40-A-LED-AMB/024		SOUNDER/BEACON, (91182), M30 MOUNT, 3-STAGE, 85dB, Ø 40mm, 12-24VAC/DC, AMBER	\$ 129.50
P40-A-LED-AMB/230		SOUNDER/BEACON, (91202), M30 MOUNT, 3-STAGE, 85dB, Ø 40mm, 48-240VAC, AMBER	\$ 165.30
P40-A-LED-GRN/024		SOUNDER/BEACON, (91184), M30 MOUNT, 3-STAGE, 85dB, Ø 40mm, 12-24VAC/DC, GREEN	\$ 129.50
P40-A-LED-GRN/230		SOUNDER/BEACON, (91204), M30 MOUNT, 3-STAGE, 85dB, Ø 40mm, 48-240VAC, GREEN	\$ 165.30
P40-A-LED-RED/024		SOUNDER/BEACON, (91183), M30 MOUNT, 3-STAGE, 85dB, Ø 40mm, 12-24VAC/DC, RED	\$ 129.50
P40-A-LED-RED/230		SOUNDER/BEACON, (91203), M30 MOUNT, 3-STAGE, 85dB, Ø 40mm, 48-240VAC, RED	\$ 165.30
P40-RGA/230		LED BEACON, (91171), M30 MOUNT, MULTI-FUNCTION, Ø 40mm, 48-240VAC, R/G/A	\$ 197.00
P40-S-AMB/024		LED BEACON, (91132), M30 MOUNT, MULTI-FUNCTION, Ø 40mm, 12-24VAC/DC, AMBER	\$ 178.50
P40-S-AMB/230		LED BEACON, (91152), M30 MOUNT, MULTI-FUNCTION, Ø 40mm, 48-240VAC, AMBER	\$ 178.50
P40-S-GRN/024		LED BEACON, (91134), M30 MOUNT, MULTI-FUNCTION, Ø 40mm, 12-24VAC/DC, GREEN	\$ 178.50
P40-S-GRN/230	LED BEACON, (91154), M30 MOUNT, MULTI-FUNCTION, Ø 40mm, 48-240VAC, GREEN	\$ 178.50	
P40-S-RED/024	LED BEACON, (91133), M30 MOUNT, MULTI-FUNCTION, Ø 40mm, 12-24VAC/DC, RED	\$ 178.50	
P40-S-RED/230	LED BEACON, (91153), M30 MOUNT, MULTI-FUNCTION, Ø 40mm, 48-240VAC, RED	\$ 178.50	
P50-RGB		LED BEACON, (91337), M22 MOUNT, MULTI-FUNCTION, Ø 50mm, 12-24VAC/DC, 6 COLOUR	\$ 195.10



### Aviation approved Obstruction Lights

Low intensity A type aviation obstruction lights are installed onto fixed objects that are less than 150m from the land or water surface. Applied on tall structures for collision avoidance measures and airport runway safety. Long life LED lamp. Excellent durability from polycarbonate lens on an aluminum housing.


QL-SAOL1-RED-24VDC		OBSTRUCTION LIGHT, LOW INTENSITY, 17cd, Ø115mm x 275mm, 24VDC, RED	\$ 397.20
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### IECEX Approved Exd Sounders and LED strobe combinations

Qlight is leading supplier of explosion proof signaling over the last couple of decades. Exproof solutions in order to meet customers' unique needs at a low cost. Applications : Ship building, Oil & Gas, On/Offshore, Fire alarm and safety, Power plant


QL-SEAL-24-A-IECEX		EXd BEACON, IECEX APPROVED, LED STEADY OR FLASHING, 24VDC, AMBER	\$ 1,179.60
QL-SEAL-24-B-IECEX		EXd BEACON, IECEX APPROVED, LED STEADY OR FLASHING, 24VDC, BLUE	\$ 1,179.60
QL-SEAL-24-R-IECEX		EXd BEACON, IECEX APPROVED, LED STEADY OR FLASHING, 24VDC, RED	\$ 1,179.60
QLSESALR-WS-220-R		EXd BEACON, IECEX APPROVED, LED STEADY OR FLASHING, 24VDC, RED	\$ 1,179.60
QLSESALR-WS-220-R-LC		EXd BEACON/SOUNDER, IECEX, REVOLVING LED, 220VAC, RED	\$ 2,092.40
QLSESALWS-24-A-IECEX		EXd BEACON/SOUNDER, IECEX, 118dB, LED STEADY OR FLASHING, 24VDC, AMBER	\$ 2,050.90
QLSESALWS-24-B-IECEX		EXd BEACON/SOUNDER, IECEX, 118dB, LED STEADY OR FLASHING, 24VDC, BLUE	\$ 2,050.90
QLSESALWS-24-R-IECEX		EXd BEACON/SOUNDER, IECEX, 118dB, LED STEADY OR FLASHING, 24VDC, RED	\$ 2,050.90
QLQNES-WS-24-R-IECEX		EXd BEACON/SOUNDER, IECEX, 110dB, LED STEADY OR FLASHING, 24VDC, RED	\$ 1,570.80

### IECEX Approved Exd Sounders

QL-SPNA-WS-24-IECEX		EXd SOUNDER, IECEX, 118dB, 5 STANDARD TONES, 24VDC	\$ 1,600.40
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### Hazardous Area Sounders and Beacons

I.S Beacons and Sounders

IS-MA1		I.S. SOUNDER, 24VDC, 102DB, 49 TONES, EEx ia T4, IECEX SIR 060045X	\$ 770.00
IS-MB1-RED		I.S. LED BEACON - RED, 24VDC, EEx ia IIC T4, IECEX SIR 060045X	\$ 915.00

Must be driven from the Safe Area by an appropriate I.S Isolator or Barrier, please contact us for more detail

## Tower Lights

### Auer Signal PC7 LED-Integrated Tower Light Sectors, IP66

70mm diameter multifunction LED Signal Tower accommodates up to 7 tower sectors, making it the tallest signal tower currently available. Using 24Vac/dc or 120-240Vac power supplies, the signal tower modules offer steady light, multifunction flashing light or rotating light functions. A 7-colour RGB module can change colours from external switching. The PC7 range LED modules are up to 6 times brighter than comparable signal towers, and include optional top light modules offering hemispherical visibility. There is also a range of multi-tone sounders with adjustable volume for mounting either inline or in the topmost position, including a recordable voice/MP3 sound module for signalling voice instructions or melodies.

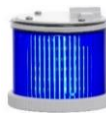
PC7DC-AMBER	LED STEADY LIGHT SECTOR, 24VAC/DC, BLACK-AMBER	\$ 144.40
PC7DCB-AMBER	LED STEADY/FLASHING LIGHT SECTOR, TOP MODULE, 24VAC/DC, BLACK- AMBER	\$ 176.70
PC7DC-BLUE	LED STEADY LIGHT SECTOR, 24VAC/DC, BLACK-BLUE	\$ 144.40
PC7DC-CLEAR	LED STEADY LIGHT SECTOR, 24VAC/DC, BLACK-CLEAR	\$ 144.40
PC7DC-GREEN	LED STEADY LIGHT SECTOR, 24VAC/DC, BLACK-GREEN	\$ 144.40
PC7DC-RED	LED STEADY LIGHT SECTOR, 24VAC/DC, BLACK-RED	\$ 144.40
PC7DF-AMBER	LED MULTIFUNCTIONAL SECTOR, 24VAC/DC, BLACK- AMBER	\$ 176.70
PC7DF-BLUE	LED MULTIFUNCTIONAL SECTOR, 24VAC/DC, BLACK- BLUE	\$ 176.70
PC7DF-CLEAR	LED MULTIFUNCTIONAL SECTOR, 24VAC/DC, BLACK- CLEAR	\$ 176.70
PC7DF-GREEN	LED MULTIFUNCTIONAL SECTOR, 24VAC/DC, BLACK- GREEN	\$ 176.70
PC7DF-MAGENTA	LED MULTIFUNCTIONAL SECTOR, 24VAC/DC, BLACK- MAGENTA	\$ 176.70
PC7DF-RED	LED MULTIFUNCTIONAL SECTOR, 24VAC/DC, BLACK- RED	\$ 176.70
PC7DF-YELLOW	LED MULTIFUNCTIONAL SECTOR, 24VAC/DC, BLACK- YELLOW	\$ 176.70
PC7DFB-AMBER	LED MULTIFUNCTIONAL TOP SECTOR, 24VAC/DC, BLACK- AMBER	\$ 265.70
PC7DFB-BLUE	LED MULTIFUNCTIONAL TOP SECTOR, 24VAC/DC, BLACK- BLUE	\$ 265.70
PC7DFB-CLEAR	LED MULTIFUNCTIONAL TOP SECTOR, 24VAC/DC, BLACK- CLEAR	\$ 265.70
PC7DFB-GREEN	LED MULTIFUNCTIONAL TOP SECTOR, 24VAC/DC, BLACK-GREEN	\$ 265.70
PC7DM	LED MULTI-COLOUR SECTOR, 7 COLOURS, 24VAC/DC, BLACK-CLEAR	\$ 398.50
PC7DMB	LED MULTI-COLOUR TOP SECTOR, 7 COLOURS, 24VAC/DC, BLACK-CLEAR	\$ 437.70
PC7DR-AMBER	LED ROTATING LIGHT SECTOR, 24VAC/DC, BLACK-AMBER	\$ 271.40
PC7DR-BLUE	LED ROTATING LIGHT SECTOR, 24VAC/DC, BLACK-BLUE	\$ 271.40
PC7DR-CLEAR	LED ROTATING LIGHT SECTOR, 24VAC/DC, BLACK-CLEAR	\$ 271.40
PC7DR-GREEN	LED ROTATING LIGHT SECTOR, 24VAC/DC, BLACK-GREEN	\$ 271.40
PC7DR-MAGENTA	LED ROTATING LIGHT SECTOR, 24VAC/DC, BLACK-MAGENTA	\$ 271.40
PC7DR-RED	LED ROTATING LIGHT SECTOR, 24VAC/DC, BLACK-RED	\$ 271.40
PC7DR-YELLOW	LED ROTATING LIGHT SECTOR, 24VAC/DC, BLACK-YELLOW	\$ 271.40
PC7DRB-AMBER	LED ROTATING LIGHT TOP SECTOR, 24VAC/DC, BLACK-AMBER	\$ 294.50
PC7DRB-BLUE	LED ROTATING LIGHT TOP SECTOR, 24VAC/DC, BLACK-BLUE	\$ 294.50
PC7DRB-CLEAR	LED ROTATING LIGHT TOP SECTOR, 24VAC/DC, BLACK-CLEAR	\$ 294.50
PC7DRB-GREEN	LED ROTATING LIGHT TOP SECTOR, 24VAC/DC, BLACK-GREEN	\$ 294.50
PC7DRB-MAGENTA	LED ROTATING LIGHT TOP SECTOR, 24VAC/DC, BLACK-MAGENTA	\$ 294.50
PC7DRB-RED	LED ROTATING LIGHT TOP SECTOR, 24VAC/DC, BLACK-RED	\$ 294.50
PC7DRB-YELLOW	LED ROTATING LIGHT TOP SECTOR, 24VAC/DC, BLACK-YELLOW	\$ 294.50
PC7TD	PC7 SOUNDER,16 TONES, TOP MOUNT MODULE	\$ 271.40
PC7VS	PC7 RECORDABLE MP3 SOUNDER, TOP MOUNT MODULE	\$ 646.80
PC7ZI	PC7 PIEZO BUZZER, 8 TONES, INLINE MOUNT MODULE	\$ 190.60
PC7ZM	PC7 PIEZO BUZZER, 8 TONES, TOP MOUNT MODULE	\$ 155.90
PC7MC5	PC7 BASE, BLACK, 24VAC/DC, 5-PIN M12 CONNECTOR	\$ 127.10
PC7MV	PC7 BASE FOR VERTICAL WALL MOUNT	\$ 41.60
PC7MW	PC7 BASE FOR HORIZONTAL MOUNTING, 1/2" NPT THREAD	\$ 43.90
PC7MR-100	PC7 100mm ALUMINIUM TUBE BASE WITH FOOT	\$ 106.30
PC7MR-250	PC7 250mm ALUMINIUM TUBE BASE WITH FOOT	\$ 129.40
PC7MR-400	PC7 400mm ALUMINIUM TUBE BASE WITH FOOT	\$ 173.30
PC7MR-600	PC7 600mm ALUMINIUM TUBE BASE WITH FOOT	\$ 317.60
PC7RS	PC7 100mm ALI TUBE BASE WITH MOUNTING SCREW	\$ 120.00
PC7BHV3	PC7 UPPER BASE FOR UP TO 3 MODULES,120-240VAC, BLACK	\$ 121.30
PC7BHV7	PC7 UPPER BASE FOR UP TO 7 MODULES,120-240VAC, BLACK	\$ 225.20
PC7BLV	PC7 UPPER BASE FOR UP TO 7 MODULES, 24VAC/DC, BLACK	\$ 54.90
PC7TM	PC7 TRANSITION MODULE, ALLOWS ALL PC7 MODULES TO BE USED 24VAC/DC	\$ 110.00



### TWS SMD LED-Integrated Tower Light Sectors, IP65

75mm diameter multifunction LED tower sectors available in 24Vac/dc or 230Vac, continuous light or 3 different flash modes selectable via DIP switch, 100,000 hours life, high-intensity LED's and fresnel lens for greater visibility. Each tower requires connecting & mounting accessories (see below); a minimum installation requires a TWS-BC wiring base and cover and a TWS-B5 standard mounting foot, but many other options are listed below

TWSSMD-M-110/GR	TWS LED TOWER SECTOR, (36514), MULTI FUNCTION,110VAC, GREEN	\$ 165.30
TWSSMD-M-24/AM	TWS LED TOWER SECTOR, (36502), MULTIFUNCTION, 24VAC/DC, AMBER	\$ 165.30
TWSSMD-M-24/BL	TWS LED TOWER SECTOR, (36501), MULTIFUNCTION, 24VAC/DC, BLUE	\$ 165.30
TWSSMD-M-24/CL	TWS LED TOWER SECTOR, (36506), MULTIFUNCTION, 24VAC/DC, CLEAR	\$ 165.30
TWSSMD-M-24/GR	TWS LED TOWER SECTOR, (36504), MULTIFUNCTION, 24VAC/DC, GREEN	\$ 165.30
TWSSMD-M-24/RD	TWS LED TOWER SECTOR, (36503), MULTIFUNCTION, 24VAC/DC, RED	\$ 165.30
TWSSMD-M-24/YE	TWS LED TOWER SECTOR, (36505), MULTIFUNCTION, 24VAC/DC, YELLOW	\$ 165.30
TWSSMD-M-240/AM	TWS LED TOWER SECTOR, (36522), MULTIFUNCTION, 240VAC, AMBER	\$ 165.30
TWSSMD-M-240/BL	TWS LED TOWER SECTOR, (36521), MULTIFUNCTION, 240VAC, BLUE	\$ 165.30
TWSSMD-M-240/CL	TWS LED TOWER SECTOR, (36526), MULTIFUNCTION, 240VAC, CLEAR	\$ 165.30
TWSSMD-M-240/GR	TWS LED TOWER SECTOR, (36524), MULTIFUNCTION, 240VAC, GREEN	\$ 165.30
TWSSMD-M-240/RD	TWS LED TOWER SECTOR, (36523), MULTIFUNCTION, 240VAC, RED	\$ 165.30
TWSSMD-M-240/YE	TWS LED TOWER SECTOR, (36525), MULTIFUNCTION, 240VAC, YELLOW	\$ 165.30


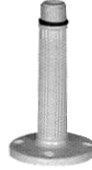


### Sounders for TWS Tower Lights

TWS-A+-AC-IP65	TWS SOUNDER MODULE, IP65, 93dB, 90-240VAC (33401)	\$ 218.20
TWS-A+-DC-IP65	TWS SOUNDER MODULE, IP65, 93dB 12-24VAC/DC (33400)	\$ 145.40
TWS-A-AC	TWS SOUNDER MODULE, IP54, 72dB, 110-240VAC, (27719)	\$ 112.40
TWS-A-DC	TWS SOUNDER MODULE, IP54, 72dB, 12-48VDC/AC (27718)	\$ 99.20





## Sirena TWS Series Tower Lights Mounting Accessories

TWS-BC		TWS TOWER SECTOR BASE & COVER (27700)	\$ 94.90
TWS-BC/BLACK		TWS TOWER SECTOR BASE & COVER, BLACK (27690)	\$ 94.90
TWS-BOX		TWS JUNCTION BOX WITH PG9 CABLE GLAND (27777)	\$ 71.60
TWS-BP1		TWS/OVOLUX SINGLE WALL BRACKET (27762)	\$ 37.60
TWS-BP1/BLACK		TWS/OVOLUX SINGLE WALL BRACKET, BLACK (27693)	\$ 37.60
TWS-BP2		TWS/OVOLUX DOUBLE WALL BRACKET (27763)	\$ 37.60
TWS-BS		TWS/OVOLUX MOUNTING BASE UNIT (27760)	\$ 26.80
TWS-FJ		TWS TOWER LIGHT, FOLDING JOINT BASE (33347)	\$ 59.60
TWS-KIT		TWS/OVOLUX 100mm PLASTIC POLE MOUNTING KIT (27764)	\$ 39.40
TWS-KIT-L/100		TWS/OVOLUX 100mm S/S POLE MOUNTING KIT (27765)	\$ 84.70
TWS-KIT-L/200		TWS/OVOLUX 200mm S/S POLE MOUNTING KIT (27766)	\$ 99.20
TWS-KIT-L/400		TWS/OVOLUX 400mm S/S POLE MOUNTING KIT (27767)	\$ 131.10
TWS-PR		TWS EXTENSION STEM 100mm (27761)	\$ 18.80
TWS-PR/BLACK		TWS EXTENSION STEM 100mm BLACK (27692)	\$ 18.80
TWS-RING		TWS SECTOR LOCKING RING (72062)	\$ 5.40
TWS-SS-BRKT		TWS S/S RIGHT ANGLE MOUNTING BRACKET (33357)	\$ 74.00

## Tower Lights


### Sirena EOS LED-Integrated Tower Light Sectors, IP69K

Cost effective 70mm diameter LED Signal Tower designed to meet the needs of OEMs and automated machine builders Smooth design that prevents dirt gathering on the surface, Ideal for environments with high brightness thanks to the clear opaline lens that allows a clear distinction between the ON and OFF state of the stacklight. Perfect light distribution at 360°. High water protection IP69K. Wiring versatility (NPN/PNP). Up to 5 luminous modules + sounder. 2 sound levels for the acoustic modules. • Smart Factory 4.0 networking capability

EOS-LM-AMBER		EOS LED SECTOR, STEADY, (94722), 24VDC, AMBER	\$ 57.80
EOS-LM-BLUE		EOS LED SECTOR, STEADY, (94721), 24VDC, BLUE	\$ 57.80
EOS-LM-GREEN		EOS LED SECTOR, STEADY, (94724), 24VDC, GREEN	\$ 57.80
EOS-LM-RED		EOS LED SECTOR, STEADY, (94723), 24VDC, AMBER	\$ 57.80
EOS-LM-RGB		EOS LED SECTOR, STEADY, (94727), 24VDC, 5 COLOURS	\$ 99.80
EOS-R/G-12/24		EOS 2-LIGHT TOWER RED/GREEN 12-24VAC/DC	\$ 231.00
EOS-SOUNDER		EOS PIEZO SOUNDER, 12 TONE - 2 CHANNEL, 75dB (947280)	\$ 99.80
EOS-SOUNDER-A+		EOS MAGNETODYNAMIC SOUNDER, 8 TONE - 2 CHANNEL, 100dB (94729)	\$ 122.90
EOS-WM-LT		EOS WIRING MODULE WITH CAP, 7 SECTORS, 12-24VAC/DC, (94730)	\$ 89.30

### ELYPS LED-Integrated Stacklight Sectors, IP65


ELYPS stacklights are designed as 360° visual modular warning towers in a strikingly innovative elyptical design and gloss black finish, with a unique mounting system and acoustic modules to offer maximum versatility in installation and operation. Creating a stacklight is done by choosing a wiring module, light modules as required, an optional acoustic module, and finally a mounting base. The range may be stacked up to 7 modules high, are IP65 rated, and available in 12/24Vac/dc or 120/240Vac versions.

ELYPS-LM-AMB		ELYPS LED SECTOR, (32332), STEADY, 24VAC/DC, AMBER	\$ 51.60
ELYPS-LM-BLU		ELYPS LED SECTOR, (32331), STEADY, 24VAC/DC, BLUE	\$ 51.60
ELYPS-LM-CLR		ELYPS LED SECTOR, (32336), STEADY, 24VAC/DC, CLEAR	\$ 51.60
ELYPS-LM-GRN		ELYPS LED SECTOR, (32334), STEADY, 24VAC/DC, GREEN	\$ 51.60
ELYPS-LM-RED		ELYPS LED SECTOR, (32333), STEADY, 24VAC/DC, RED	\$ 51.60
ELYPS-LM/S-AMB		ELYPS BRIGHT LED SECTOR, (32372), STEADY, 24VAC/DC, AMBER	\$ 112.40
ELYPS-LM/S-BLU		ELYPS BRIGHT LED SECTOR, (32371), STEADY, 24VAC/DC, BLUE	\$ 112.40
ELYPS-LM/S-CLR		ELYPS BRIGHT LED SECTOR, (32376), STEADY, 24VAC/DC, CLEAR	\$ 112.40
ELYPS-LM/S-GRN		ELYPS BRIGHT LED SECTOR, (32374), STEADY, 24VAC/DC, GREEN	\$ 112.40
ELYPS-LM/S-RED		ELYPS BRIGHT LED SECTOR, (32373), STEADY, 24VAC/DC, RED	\$ 112.40
ELYPS-LM/X-AMB		ELYPS SUPERBRIGHT LED SECTOR (32392), MULTIFLASH, 24VAC/DC, AMBER	\$ 125.60
ELYPS-LM/X-RED		ELYPS SUPERBRIGHT LED SECTOR (32353), MULTIFLASH, 24VAC/DC, AMBER	\$ 125.60
ELYPS-LMS/MLT-AMB		ELYPS BRIGHT LED SECTOR (32392), MULTIFLASH, 24VAC/DC, AMBER	\$ 130.90
ELYPS-LMS/MLT-BLU		ELYPS BRIGHT LED SECTOR (32391), MULTIFLASH, 24VAC/DC, BLUE	\$ 130.90
ELYPS-LMS/MLT-GRN		ELYPS BRIGHT LED SECTOR (32394), MULTIFLASH, 24VAC/DC, GREEN	\$ 130.90
ELYPS-LMS/MLT-RED		ELYPS BRIGHT LED SECTOR (32393), MULTIFLASH, 24VAC/DC, RED	\$ 130.90

### ELYPS Acoustic Modules

ELYPS-AM	ELYPS PIEZO ACOUSTIC MODULE, 95dB	\$ 149.40
ELYPS-AM/S	ELYPS ACOUSTIC MODULE, 16-TONE, 95dB	\$ 198.30

### ELYPS Wiring Modules

ELYPS-WM/MLT-HT		ELYPS WIRING MODULE, (32327), MULTIFUNCTION, 90-240VAC/DC, BLACK	\$ 198.30
ELYPS-WM/MLT-LT		ELYPS WIRING MODULE, (32468), MULTIFUNCTION, 12-24VAC/DC, BLACK	\$ 189.10
ELYPS-WM-HT		ELYPS WIRING MODULE, (32321), 90-240VAC/DC, BLACK	\$ 149.40
ELYPS-WM-LT		ELYPS WIRING MODULE, (32458), 12-24VAC/DC, BLACK	\$ 43.70
ELYPS-WM-LT-GREY		ELYPS WIRING MODULE, (32457), 12-24VAC/DC, GREY	\$ 43.70

### ELYPS Mounting Bases

ELYPS-MB-EXT	ELYPS EXTENDED MOUNTING BASE (32378)	\$ 51.60
ELYPS-MB-FLAT	ELYPS FLAT MOUNTING BASE (32358) - BLACK	\$ 26.40
ELYPS-MB-FLAT-GREY	ELYPS FLAT MOUNTING BASE (32357) - GREY	\$ 26.40
ELYPS-MB-POLE	ELYPS POLE MOUNTING BASE (32388)	\$ 50.90
ELYPS-MB-TUBE	ELYPS TUBE BASE FOR S/S POLE (32398)	\$ 38.00
ELYPS-MB-WALL	ELYPS WALL MOUNTING BASE (32368)	\$ 55.90
ELYPS-TUBE-100	ELYPS S/S TUBE BASE (32424) - 100mm	\$ 82.90
ELYPS-TUBE-200	ELYPS S/S TUBE BASE (32425) - 200mm	\$ 94.80
ELYPS-TUBE-300	ELYPS S/S TUBE BASE (32426) - 300mm	\$ 106.70
ELYPS-TUBE-400	ELYPS S/S TUBE BASE (32427) - 400mm	\$ 118.50

### Half Dome 90 Signal Tower Lights – LED-Integrated

IP65 signal tower, red, amber, green, blue, yellow and clear light sectors in 3 - 5 light combinations, in chrome finish housing (white housing also available). Optional 70 - 90dB piezo sounder available to order.

Note: These units are indent items, not stocked in NZ.


HD90-Q01		HALF-DOME TOWER 24VDC RED/AMBER/GREEN LED	\$ 435.80
HD90-Q02		HALF-DOME TOWER 24VDC RED/GREEN LED	\$ 402.90
HD90-Q31		HALF-DOME TOWER 24VDC RED/AMBER/GREEN LED + BUZZER	\$ 456.80
HD90-Q32		HALF-DOME TOWER 24VDC RED/GREEN LED PLUS BUZZER	\$ 428.00
HD90-Q36		HALF-DOME TOWER 24VDC R/A/G/B/C PLUS BUZZER	\$ 700.00
HD90-Q51		HALF-DOME TOWER 230VAC RED/AMBER/GREEN LED	\$ 509.90



## Audible Alarms - Electronic Sounders


### SIR-TOUCH Industrial Sounder - Touch Programmable, M12 Connection

SIR-TOUCH is a unique industrial signalling device, offering a choice of 64 tones at a maximum of 120 dB(A) and user-friendly touch programmability. The M12 connector allows for ease of wiring and the safe touch procedure provides ease of set-up and adjustment. Available in 24Vac/dc or 85-265Vac (50/60Hz) models, SIR-TOUCH is rated for continuous use up to volume level 4, then de-rated to 15mins ON - 5mins OFF for volume level 5, and 5mins ON - 5mins OFF for volume level 6. A model with red front flashing light is also available. SIR-TOUCH is protected to IP68.




SIR-TOUCH-024		SOUNDER, 64 TONES, MULTIFUNCTION, (90750), 120dB, 12/24VAC/DC	\$ 711.30
SIR-TOUCH-230		SOUNDER, 64 TONES, MULTIFUNCTION, (90751), 120dB, 85-265AC	\$ 754.10
SIR-TOUCH-WALL		WALL MOUNTING BRACKET, (90754), FOR SIR-TOUCH SOUNDER	\$ 70.50

### Sirena M-Line SIR-E Sounder

Multifunction electronic sounder with 2 alarm levels (pre-alarm, alarm) controllable independently via separate contacts, 64 tones, with volume control to 65dB min, IP65 rated and offers 5 different base options, to suit any application, 92mm diameter. Complete unit requires a choice of sounder and base

SIR-E SOUNDER		SOUNDER, 2 STAGE, 64 TONES, (90360), 105dB, 12/24VAC/DC, GREY	\$ 205.60
SIR-E SOUNDER-WH		SOUNDER, 2 STAGE, 64 TONES, (90359), 105dB, 12/24VAC/DC, WHITE	\$ 205.60
SIR-E MAX		SOUNDER, 2 STAGE, 64 TONES, (90407), 115dB, 12/24VAC/DC, GREY	\$ 412.40

### ACCESSORIES



M-LINE BASE 40-80V		M-LINE DEEP BASE (90432), 40-80VAC/DC GREY	\$ 126.90
M-LINE BASE-230V		M-LINE DEEP BASE (90369), 120/240VAC GREY	\$ 126.90
M-LINE BASE-230V-BLK		M-LINE DEEP BASE (90458), 120/240VAC BLACK	\$ 126.90
M-LINE BASE-230V-RED		M-LINE DEEP BASE (90508), 120/240VAC RED	\$ 126.90
M-LINE BASE-230V-WH		M-LINE DEEP BASE (90509), 120/240VAC WHITE	
M-LINE BASE-DEEP		M-LINE DEEP BASE (90368), 12-24VAC/DC GREY	\$ 26.40
M-LINE BASE-DEEP-BLK		M-LINE DEEP BASE (90452), 12-24VAC/DC BLACK	\$ 26.40
M-LINE BASE-DEEP-RED		M-LINE DEEP BASE (90345), 12-24VAC/DC RED	\$ 26.40
M-LINE BASE-DEEP-WH		M-LINE DEEP BASE (90346), 12-24VAC/DC WHITE	\$ 26.40
M-LINE BASE-SH		M-LINE SHALLOW BASE (90367), 12-24VAC/DC GREY	\$ 26.40
M-LINE BASE-SH-BLK	M-LINE SHALLOW BASE (90451), 12-24VAC/DC BLACK	\$ 26.40	
M-LINE BASE-SH-RED	M-LINE SHALLOW BASE (90343), 12-24VAC/DC RED	\$ 26.40	
M-LINE BASE-SH-WH	M-LINE SHALLOW BASE (90344), 12-24VAC/DC WHITE	\$ 26.40	
M-LINE CAGE SIZE 1		HEAVY DUTY STAINLESS STEEL CAGE(90551) SIZE 1	\$ 119.00
M-LINE CAGE SIZE 2		HEAVY DUTY STAINLESS STEEL CAGE (90552) SIZE 2	\$ 124.30
M-LINE CAGE SIZE 3		HEAVY DUTY STAINLESS STEEL CAGE (90553)SIZE 3	\$ 144.20
M-LINE CAGE SIZE 4		HEAVY DUTY STAINLESS STEEL CAGE (90554) SIZE 4	\$ 148.10
M-LINE COLLAR IP69K		IP69K COLLAR FOR M-LINE MODULES (72248)	\$ 9.80
M-LINE DBL-12/24V		M-LINE DOUBLE WALL MOUNT BASE (90372), 12-24VAC/DC GREY	\$ 46.30
M-LINE DBL-12/24V-BL		M-LINE DOUBLE WALL MOUNT BASE (90454), 12-24VAC/DC BLACK	\$ 46.30
M-LINE DBL-12/24V-WH		M-LINE DOUBLE WALL MOUNT BASE (90374), 12-24VAC/DC WHITE	\$ 46.30
M-LINE DBL-230V		M-LINE DOUBLE WALL MOUNT BASE (90512), 120/240VAC GREY	\$ 171.90
M-LINE DBL-230V-WH		M-LINE DOUBLE WALL MOUNT BASE (90514), 120/240VAC WHITE	\$ 171.90
M-LINE FLUSH-12/24-W		M-LINE FLUSH MOUNT BASE (90375), 12/24VAC/DC WHITE	\$ 42.30
M-LINE FLUSH-230V-WH		M-LINE FLUSH MOUNT BASE (90376), 120/240VAC WHITE	\$ 148.10
M-LINE POLE-12/24V		M-LINE POLE MOUNT BASE (90610), 12-24VAC/DC GREY	\$ 33.10
M-LINE POLE-230V		M-LINE POLE MOUNT BASE (90612)120/240VAC GREY	\$ 146.00
M-LINE WALL-12/24V		M-LINE WALL MOUNT BASE (90370), 12-24VAC/DC GREY	\$ 33.10
M-LINE WALL-12/24V-R		M-LINE WALL MOUNT BASE (90347), 12-24VAC/DC RED	\$ 33.10
M-LINE WALL-12/24V-W		M-LINE WALL MOUNT BASE (90348), 12-24VAC/DC WHITE	\$ 33.10
M-LINE WALL-230V		M-LINE WALL MOUNT BASE (90371), 120/240VAC GREY	\$ 143.00
M-LINE WALL-230V-WH		M-LINE WALL MOUNT BASE (90511), 120/240VAC WHITE	\$ 143.00
M-LINE-PNP-12VDC-PCB		M-LINE PNP DRIVE ADAPTOR 12VDC SUPPLY PCB ONLY	\$ 85.70
M-LINE-PNP-24VDC		M-LINE PNP DRIVE ADAPTOR 24VDC SUPPLY	\$ 128.50
M-LINE-PNP-24VDC-PCB		M-LINE PNP DRIVE ADAPTOR 24VDC SUPPLY PCB ONLY	\$ 85.60

## Auer Signal AS Series Sounders

AS series sounders feature multiple selectable tones up to 120dB, 3-stage alarm externally switchable, volume control by potentiometer and versatile mounting options. IP66 rated when fitted with the appropriate gasket (see below), and fit for PLC applications (leakage, inrush current). ASS-T is 94mm2, ASM 132mm2 and ASL 184mm2. Perfectly partnered with the Q range of IP66 beacons


ASS-T-024		SOUNDER, IP66, 32 TONE, 108dB, 24-48VAC/DC	\$ 271.10
ASS-T-240		SOUNDER, IP66, 32 TONE, 108dB, 110-240VAC	\$ 337.10
ASM-024		SOUNDER 32-TONE 113dB IP66 24-48VAC/DC	\$ 370.10
ASM-240		SOUNDER 32-TONE 113dB IP66 110- 240VAC	\$ 475.90
ASL-024		SOUNDER 63-TONE 120dB IP66 24-48VAC/DC	\$ 740.30
ASL-240		SOUNDER 63-TONE 120dB IP66 240VAC	\$ 766.70
ASX-240		SOUNDER, IP66, 63-TONE, 127dB, 240VAC	\$ 1,586.30

### Accessories

BRACKET-AB1		MOUNTING BRACKET SIZE 1 FOR QDS/ASS-T	\$ 74.00
BRACKET-AB2		MOUNTING BRACKET SIZE 2 FOR QDM/ASM	\$ 83.30
BRACKET-AB3		MOUNTING BRACKET SIZE 3 FOR QDL/ASL	\$ 138.90
BRACKET-AB4		MOUNTING BRACKET SIZE 4 FOR QBL/ASX	\$ 161.10
GASKET-AG1		GASKET IP66, SIZE 1, FOR QDS/ASS-T	\$ 29.10
GASKET-AG2		GASKET IP66, SIZE 2, FOR QDM/ASM	\$ 33.10
GASKET-AG3		GASKET IP66, SIZE 3, FOR QDL/ASL	\$ 39.00
GASKET-AG4		GASKET IP66, SIZE 1, FOR QDX/ASX	\$ 49.00
KIT-AMK		COUPLING, FOR JOINING QDS/M & ASS/M PAIRS	\$ 20.50



## Auer Signal ES Series Sounders

ES series sounders offer a cost-effective surface-mount solution for any alarm application. Output (106dB max) with volume control via DIP switch and low current draw, combined with 32 tone 3-stage alarm functions and IP65 protection, available in red or white

ES1-RED		SOUNDER, IP65, 32-TONE 106dB, 3 STAGE,18-35VDC	\$ 167.40
ES2-RED		SOUNDER, IP65, 32-TONE 106dB, 3 STAGE,110-230VAC	\$ 313.40

## Eaton Roshni Sounders

32 tone 2-stage alarm sounders, 101dB(A) to 110dB(A) with 20dB volume cut by DIP switch, continuously rated. Base colour can be red or white (red std). IP54 with a shallow base, IP65 by using a deep base. 93mm Dia x 66mm high with shallow base. In addition they can be powered from 110Vac or 230Vac by using a Deep Powered Base that incorporates a 100mA 24Vdc power supply

ROSHNI-1992		SOUNDER, IP65, 32 TONES,100dB,110-240VAC,	\$ 208.90
ROSHNI-ROLP		SOUNDER, IP54, 32 TONES,100dB, 9-28VDC,	\$ 148.10
ROSHNI-ROLP-48		SOUNDER, IP65, 32 TONES 100dB,43-57VDC,	\$ 236.70
ROSHNI-RORS		ELECTRONIC SOUNDER 12-30V AC/DC	\$ 163.90
BASE-DEEP-PWD-RED		FULLEON POWERED BASE, 50x93mm, INPUT 110-240VAC - OUT 24VDC 100mA, RED	\$ 58.20
BASE-DEEP-PWD-WHITE		FULLEON POWERED BASE, 50x93mm, INPUT 110-240VAC - OUT 24VDC 100mA, WHITE	\$ 58.20
BASE-DEEP-RED		FULLEON SOUNDER/BEACON BASE, 50x93mm, RED	\$ 23.80
BASE-DEEP-WHITE		FULLEON SOUNDER/BEACON BASE, 50x93mm, WHITE	\$ 23.80
BASE-SHALLOW-RED		FULLEON SOUNDER/BEACON BASE, 20x93mm, RED	\$ 23.80
BASE-SHALLOW-WHITE		FULLEON SOUNDER/BEACON BASE, 20x93mm, RED	\$ 23.80
BASE-U-RED		FULLEON U" BASE RED"	\$ 23.80

## Audible Alarms - Electronic Sounders


### Eaton Symphoni Sounder

The Symphoni Sounder produces high Output levels up to 120dB. 32 tones available with 20dB volume control. Although a high power design the unit is very efficient offering relatively low current consumption (240mA).


SYMPHONI-HO		SOUNDER, 120dB WITH VOLUME CONTROL, 9-28VDC 240mA	\$ 441.50
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### Eaton Asserta Sounder

The Asserta warning sounder is an IP66, 3 stage alarm with 42 tones. It incorporates, a user adjustable sounder time out, and a 110 - 120dB(A) output, depending on tone selected.


ASSERTA-230VAC		SOUNDER, IP66, 3 STAGE, 42 TONES, 120DB, 115-230VAC	\$ 1,056.30
ASSERTA-24VDC		SOUNDER, IP66, 3 STAGE, 42 TONES, 120DB, 24VDC	\$ 1,056.30

### QLight type QWHTSD sounders

QL-QWH35TSD-24-LC		SOUNDER 113DB, MP3 PRE-RECORDED SOUNDS VIA SD CARD + 31 STANDARD TONES, 12-	\$ 858.10
QL-QWH50TSD-24-LC		SOUNDER 118DB, MP3 PRE-RECORDED SOUNDS VIA SD CARD + 31 STANDARD TONES, 12-	\$ 903.20


### Eaton Low Profile Sounders

The Squashni sounder is designed for wall or ceiling mount and offers a mounting platform for a visual alarm, smoke detector or other, to make a combination audio/visual or detector/alarm. IP54 rated, 2-stage capable, 103dB(A) max, with 20dB volume control


SQUASHNI-SQ-05-W-VC		SOUNDER IP54, 32 TONE, 93 -102 dB,10-28V DC	\$ 133.60
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## Eaton Askari Sounders

The Askari sounder range offers 4 models, all with volume control. The APW5 and AFW5 models provide a piercing sweep tone, with a second tone available if installed with a 3-wire cable. The ACW5 "Compact" and APWS models offer 32 tones and 2 alarm stages


ASKARI-ACWS		COMPACT SOUNDER, 32 TONE, 100dB, SWITCHED VOLUME CONTROL, 10-28VDC	\$ 133.60
ASKARI-AFW5-VC		FLANGE MOUNTED COMPACT SOUNDER, 100dB, VOLUME CONTROL, 10-28VDC	\$ 133.60
ASKARI-APW5-NO-VC		PANEL MOUNT SOUNDER, 100dB NO VOLUME CONTROL, 10-28vdc	\$ 133.60
ASKARI-APW5-VC		PANEL MOUNT SOUNDER, 100dB WITH VOLUME CONTROL, 10-28VDC	\$ 133.60

### Electromechanical buzzer, approx 80dB. Rated for intermittent operation only





CZ80-6VDC		BUZZER, 80dB, 6VDC 150mA, INTERMITTENT OPERATION	\$ 51.60
CZ80-12VAC		BUZZER, 80dB, 12VAC 1A, INTERMITTENT OPERATION	\$ 51.60
CZ80-12VDC		BUZZER, 80dB, 12VDC 100mA, INTERMITTENT OPERATION	\$ 51.60
CZ80-230VAC		BUZZER, 80dB, 230VAC 60mA, INTERMITTENT OPERATION	\$ 64.80
CZ80-24VAC		BUZZER, 80dB, 24VAC 600mA, INTERMITTENT OPERATION	\$ 51.60
CZ80-24VDC		BUZZER, 80dB, 24V DC 75mA, INTERMITTENT OPERATION	\$ 51.60

### Sirena IP65 Industrial Buzzers

Electromechanical buzzer, IP65. Rated for continuous and or intermittent use, 300Hz tone frequency.


MICROSAI-230VAC		HORN BUZZER (53015), IP65, CONTINUOUS OPERATION, 95dB, 230VAC	\$ 130.70
MICROSAI-SI-230VAC		HORN BUZZER (53534), IP65, INTERMITTENT OPERATION, 95dB, 230VAC	\$ 177.10

### Panel Mounted Buzzers


BIP92-A-240		BUZZER, 16, 22 OR 30mm PANEL MOUNT (33087), 44mm Ø, 75dB, 240VAC	\$ 127.20
BIP92-CA-012		BUZZER, 16, 22 OR 30mm PANEL MOUNT (42318), 44mm Ø, 75dB, 12VAC/DC	\$ 127.20
BIP92-CA-024		BUZZER, 16, 22 OR 30mm PANEL MOUNT (42318), 44mm Ø, 75dB, 24VAC/DC	\$ 127.20
ESG-12/24V		BUZZER M22 PANEL MOUNT 65mm Ø, IP65, 105dB, 12/24VAC/DC	\$ 256.10
ESG-230V		BUZZER M22 PANEL MOUNT 65mm Ø, IP65, 105dB, 230VAC	\$ 288.30
ESM-12/24V		BUZZER M22 PANEL MOUNT 45mm Ø, IP65, 100dB, 12/24VAC/DC	\$ 150.50
ESM-230V		BUZZER M22 PANEL MOUNT 45mm Ø, IP65, 100dB, 12/24VAC/DC	\$ 172.10
P40-A/024		PIEZO SOUNDER, (91177), M30 PANEL MOUNT, 2-STAGE, Ø 40mm, 85dB, 12-24VAC/DC	\$ 104.50
P40-A/230		PIEZO SOUNDER, (91179), M30 PANEL MOUNT, 2-STAGE, Ø 40mm, 85dB, 48-240VAC	\$ 138.90
P50-A		PIEZO SOUNDER, (91327), M22 PANEL MOUNT, 2-STAGE, Ø 50mm, 92dB, 12-24VAC/DC	\$ 163.70
SE16D-BZ-230V		BUZZER 16mm, PANEL MOUNT, 18mm Ø, 80DB, 230VAC, BLACK	\$ 31.10
SE16D-BZ-24V		BUZZER 16mm, PANEL MOUNT, 18mm Ø, 80DB, 24VAC/DC, BLACK	\$ 31.10
SEL-22D-BZ/FL-240-RD		BUZZER, 22mm PANEL MOUNT, 29mm Ø, 80DB, 230VAC, RED	\$ 33.70
SEL-22D-BZ-230V		BUZZER, 22mm PANEL MOUNT, 29mm Ø, 80DB, 230VAC, BLACK	\$ 33.10
SEL-22D-BZ-24V		BUZZER, 22mm PANEL MOUNT, 29mm Ø, 80DB, 24VAC/DC, BLACK	\$ 33.10

### CB150 Bell

The CB150 bells are audible signal devices for fire alarms and general signalling. They are under-dome striker design fitted with weather resistant dust covers, 150mm (6") diameter. Rugged construction, steel dome with tough plastic base, suitable for indoor or sheltered outdoor installations as standard, but an IP65 kit is available for full outdoor use. Sound level typically greater than 90dB @ 1m. Rated for intermittent operation.

CB150-6VDC		UNDERDOME ELECTRONIC BELL, 150mm, 6VDC	\$ 97.80
CB150-12VAC		UNDERDOME ELECTRONIC BELL, 150mm, 12VAC	\$ 164.00
CB150-12VDC		UNDERDOME ELECTRONIC BELL, 150mm, 12VDC	\$ 97.80
CB150-24VAC		UNDERDOME ELECTRONIC BELL, 150mm, 24VAC	\$ 201.10
CB150-24VDC		UNDERDOME ELECTRONIC BELL, 150mm 24VDC	\$ 97.80
CB150-110VAC		UNDERDOME ELECTRONIC BELL, 150mm ,110VAC	\$ 112.40
CB150-230VAC		UNDERDOME ELECTRONIC BELL, 150mm, 230VAC	\$ 112.40
CB150-WP-KIT		WEATHERPROOF KIT FOR CB150, 150mm BELL	\$ 33.10

### Sirena Underdome Bells

SDL165-012-DC		BELL, (54214), 200mm Ø, IP66, 100dB, 12VDC	\$ 279.40
SDL165-024-DC		BELL, (54215), 200mm Ø, IP66, 100dB, 24VDC	\$ 279.40
SD165-012-AC		BELL, (54200), 200mm Ø, IP66, 100dB, 12VAC	\$ 220.30
SD165-024-AC		BELL, (54201), 200mm Ø, IP66, 100dB, 24VAC	\$ 220.30
SD165-110-AC		BELL, (54204), 200mm Ø, IP66, 100dB, 110V-AC	\$ 220.30
SD165-240-AC		BELL, (54206), 200mm Ø, IP66, 100dB, 240VAC	\$ 220.30

## Audible Alarms - Sirens / Wide Area Sirens/ Fire Alarm Systems

### Electric Motor Sirens and Horns

MICROW-10A-110		ELECTRIC MOTOR SIREN, (42210), 93dB, 110VAC	\$ 166.60
MICROW-10A-240		ELECTRIC MOTOR SIREN, (42212), 93dB, 240VAC	\$ 166.60
MICROW-10N-12D		ELECTRIC MOTOR SIREN, (42200), 94dB, 12VDC	\$ 87.70
MICROW-10N-24A		ELECTRIC MOTOR SIREN, (42203), 96dB, 24VAC	\$ 107.50
MICROW-10N-24D		ELECTRIC MOTOR SIREN, (42202), 96dB, 24VDC	\$ 87.70
CELERE-024		ELECTRIC MOTOR SIREN, (42021), 109dB, 24VAC/DC	\$ 356.90
CELERE-240		ELECTRIC MOTOR SIREN, (42025), 110dB, 240VAC	\$ 356.90
CELERE-SUPER-024		ELECTRIC MOTOR SIREN, (42047), 114dB, 24VAC/DC	\$ 518.20
CELERE-SUPER-110		ELECTRIC MOTOR SIREN, (42043), 116dB, 110VAC	\$ 482.60
CELERE-SUPER-240		ELECTRIC MOTOR SIREN, (42045), 116dB, 240VAC	\$ 482.60
SEM-024-AC		SEM INDUSTRIAL HORN, (40305), 92dB, 24VAC	\$ 89.50
SEM-024-DC		SEM INDUSTRIAL HORN, (40304), 96dB, 24VDC	\$ 89.50
SEM-110-AC		SEM INDUSTRIAL HORN, (40309), 92dB, 110VAC	\$ 89.50
SEM-240-AC		SEM INDUSTRIAL HORN, (40311), 92dB, 240VAC	\$ 89.50
EHS-D-12/24V		MULTI-TONE ALARM SOUNDER, IP66,118dB,12/24VACDC	\$ 1,181.80
EHS-D-230V		MULTI-TONE ALARM SOUNDER, IP66,118dB,230VAC	\$ 1,298.00
HTG-110VAC		INDUSTRIAL HORN, SINGLE TONE, IP65,108dB, 110VAC	\$ 651.80
HTG-230VAC		INDUSTRIAL HORN, SINGLE TONE, IP65,108dB, 230VAC	\$ 651.80
HTG-24VAC		INDUSTRIAL HORN, SINGLE TONE, IP65,108dB, 24VAC	\$ 651.80
HTG-24VDC		INDUSTRIAL HORN, SINGLE TONE, IP65,108dB, 24VDC	\$ 733.70

## EWS 6 Multi-Tone Electronic Sounder

Carrel Electrade manufactured electronic sounder, 16 selectable sounds, complies with NZS4512: 1997 Fire Alarms Systems in Buildings Codes, IP66, 1 hour duty rating 112dB, 24Vdc

EWS6-10-30VDC



ELECTRONIC SOUNDER, SPEAKER TYPE, IP66, 16 TONES, 112dB, 24VDC

\$ 255.20

### Multi-Mode Wide Area Warning Signal/Speaker System, 117dB

Carrel Electrade manufactured, multitone wide area warning system, 15 tones selectable by DIP switch, provision for external switching for remote control, adjustable volume from zero to full power, continuously rated, 117dB

EWS4P-110VAC

ELECTRONIC WIDE AREA ALARM SYSTEM, WITHOUT SPEAKER, 117dB, 110VAC

\$ 392.70

EWS4P-12VDC

ELECTRONIC WIDE AREA ALARM SYSTEM, WITHOUT SPEAKER, 117dB, 12VDC

\$ 392.70

EWS4P-230VAC

ELECTRONIC WIDE AREA ALARM SYSTEM, WITHOUT SPEAKER, 117dB, 220VAC

\$ 392.70

EWS4P-24VAC

ELECTRONIC WIDE AREA ALARM SYSTEM, WITHOUT SPEAKER, 117dB, 24VAC

\$ 392.70

EWS4P-24VDC

ELECTRONIC WIDE AREA ALARM SYSTEM, WITHOUT SPEAKER, 117dB, 24VDC

\$ 392.70

EWS4P-48VAC

ELECTRONIC WIDE AREA ALARM SYSTEM, WITHOUT SPEAKER, 117dB, 48VAC

\$ 498.40

EWS4PL-110VAC

ELECTRONIC WIDE AREA ALARM SYSTEM, 100V LINE, WITHOUT SPEAKER, 117dB, 110VAC

\$ 430.80

EWS4PL-230VAC

WIDE AREA ELECTRONIC ALARM SYSTEM, 100V LINE, WITHOUT SPEAKER, 117dB, 230VAC

\$ 430.80



MPH-5300

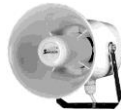
HORN SPEAKER, IP66, ABS WITH S/S BRACKET, 30W/100V LINE VERSION, 500-7K Hz

\$ 192.50

MPH-5308

HORN SPEAKER, IP66, ABS WITH S/S BRACKET, 8 OHM 30 WATT VERSION, 500-7K Hz

\$ 150.50



EWAS-1PH-SINGLE

MOTOR DRIVEN SINGLE ENDED SIREN, 2.2KW, 1PH, 230VAC, 130dB 500Hz

\$ 6,399.00

EWAS-3PH-DOUBLE

MOTOR DRIVEN DOUBLE ENDED SIREN, 4.0KW, 3PH 400VAC, 133dB 525Hz

\$ 11,005.00

EWAS-3PH-SINGLE

MOTOR DRIVEN SINGLE ENDED SIREN, 2.2KW, 3PH 400VAC, 130dB 500Hz

\$ 6,399.00



### Wall Mounted Fire Alarms & Call Points

Self-contained Type 1 wall mounted fire alarm systems, powered by Eveready 731 6V battery (not supplied), connection for external 6V supply, provision for connection between two or more units so that all alarms operate from any one call point.

NOTE: Historical compliance to NZS 4512:1994 for Type 1 fire alarm systems. They DO NOT COMPLY with the latest standard, and should only be used to replace existing units or in situations that do not require a monitored fire alarm system

MFA1B-6VDC

MANUAL FIRE ALARM, BELL TYPE SLAVE UNIT, 6VDC (WITHOUT BATTERY)

\$ 494.70

MFA1E-6VDC

MANUAL FIRE ALARM, ELECTRONIC SLAVE UNIT, 6VDC (WITHOUT BATTERY)

\$ 564.80

MFA2B-6VDC

MANUAL FIRE ALARM, BELL TYPE MASTER UNIT, 6VDC (WITHOUT BATTERY)

\$ 587.00

MFA-2E-12V-ROSHNI

MANUAL FIRE ALARM ELECTRONIC MASTER UNIT

\$ 587.50

MFA-2E-230V-ROSHNI

MANUAL FIRE ALARM ELECTRONIC MASTER UNIT

\$ 641.20

MFA2E-6VDC

MANUAL FIRE ALARM, ELECTRONIC MASTER UNIT, 6VDC (WITHOUT BATTERY)

\$ 637.30

MCP-57-150

MANUAL CALL POINT FP0324, RED 130x130mm

\$ 112.40

MCP-57-150-GLASS

REPLACEMENT GLASS FOR MCP57-150 CALL POINT (98x75mm)

\$ 12.00



### Resettable Call Points

The WRP-11 is a unique manual call point that mimics the feel of breaking glass whilst offering the user all the benefits and advantages of a re-settable operating element. The WRP-11 uses a simple yet ingenious patented mechanism which consists of a rigid plastic operating element and an over-centre spring mechanism. An activation indicator drops into view at the top of the window once the call point has been operated. The unit is then simply reset with a key and is ready for re-use straight away. IP67 protected, with two independent 6A 125-240Vac/3A 12-24dc SPCO contacts

WRP2-B-11-CI

WEATHER PROOF, RESETTABLE CALL POINT WITH COVER, 125-240VAC, SPCO, BLUE

\$ 412.40

WRP2-G-11-CI

WEATHER PROOF, RESETTABLE CALL POINT WITH COVER, 125-240VAC, SPCO, GREEN

\$ 412.40

WRP2-R-11-CI

WEATHER PROOF, RESETTABLE CALL POINT WITH COVER, 125-240VAC, SPCO, RED

\$ 412.40

WRP2-W-11-CI

WEATHER PROOF, RESETTABLE CALL POINT WITH COVER, 125-240VAC, SPCO, WHITE

\$ 412.40

WRP2-Y-11-CI

WEATHER PROOF, RESETTABLE CALL POINT WITH COVER, 125-240VAC, SPCO, YELLOW

\$ 412.40



WRP-CI-COVER

CLEAR COVER FOR WRP2 CALL POINTS

\$ 23.20

WRP-RP-K

RESET KEY FOR WRP CALL POINTS

\$ 4.30



## Miniature Filament Lamps

A range of miniature low wattage lamps suitable for pilot lights, indicators, etc. Other voltages, sizes and wattages available; indent lead times and minimum order quantities may apply.

Through our European supplier, we can also offer many many other miniature and sub-miniature lamp types, including telephone lamps, Midget Flange Groove Bi-pin, Festoon, Capless Wedges, Navigation ;amps and many others. Indent lead times and minimum order quantities may apply.

Please contact us for further details on range of filament lamp we do.

### Bayonet Cap Bases

BA90923-024-002	BA9 LAMP 9x23 24V 2W	\$ 2.60
BA90923-130-002	BA9 LAMP 9x23 130V 2.6W	\$ 7.00
BA90923-240-002	BA9 LAMP 9x23 240V 2.4W	\$ 7.00
BA91028-024-002	BA9 LAMP 10x28 24-30V 2W	\$ 2.60
BA91028-130-002	BA9 LAMP 10x28 130V 2.4W	\$ 7.00
BA91028-240-002	BA9 LAMP 10x28 240V 2.4W	\$ 7.00
B151648-024-005	BA15d 16x48 LAMP 24V 5W	\$ 7.00
B151648-130-005	BA15d 16x48 LAMP 130V 5W	\$ 7.00
B151648-220-006	BA15d 16x48 LAMP 220/260V 6/10W	\$ 7.00

### Edison Screw Base

E101028-024-002	E10 LAMP 10x28 24-30V 2W	\$ 2.60
E101028-130-002	E10 LAMP 10x28 130V 2.6W	\$ 7.00
E100923-130-002	E10 LAMP 9x23 130V 2.6W	\$ 7.00
E100923-220-003	E10 LAMP 9x23 220V 3W	\$ 7.00
E141648-024-005	E14 LAMP 16x48 24V 5W	\$ 7.00
E141648-130-005	E14 LAMP 16x48 130V 5W	\$ 7.00
E141648-220-006	E14 LAMP 16x48 220/260V 6/10W	\$ 7.00

### Based LED Lamps

BA9 AND E10 based LED LAMPS, single-chip, super-bright LED element, available in voltage of 6Vac/dc, 12Vac /dc, 24 Vac/dc, 110Vac/dc and 230vac

BA9LED-006-AMB	BA9 LED 6VAC/DC AMBER	\$ 14.40
BA9LED-006-BLU	BA9 LED 6VAC/DC BLUE	\$ 19.10
BA9LED-006-GRN	BA9 LED 6VAC/DC GREEN	\$ 19.10
BA9LED-006-RED	BA9 LED 6VAC/DC RED	\$ 14.40
BA9LED-006-WHI	BA9 LED 6VAC/DC WHITE	\$ 19.10
BA9LED-006-YEL	BA9 LED 6VAC/DC YELLOW	\$ 14.40
BA9LED-012-AMB	BA9 LED 12VAC/DC AMBER	\$ 14.40
BA9LED-012-GRN	BA9 LED 12VAC/DC GREEN	\$ 19.10
BA9LED-012-RED	BA9 LED 12VAC/DC RED	\$ 14.40
BA9LED-012-WHI	BA9 LED 12VAC/DC WHITE	\$ 19.10
BA9LED-012-YEL	BA9 LED 12VAC/DC YELLOW	\$ 14.40
BA9LED-024-AMB	BA9 LED 24VAC/DC AMBER	\$ 14.40
BA9LED-024-BLU	BA9 LED 24VAC/DC BLUE	\$ 19.10
BA9LED-024-GRN	BA9 LED 24VAC/DC GREEN	\$ 19.10
BA9LED-024-RED	BA9 LED 24VAC/DC RED	\$ 14.40
BA9LED-024-WHI	BA9 LED 24VAC/DC WHITE	\$ 19.10
BA9LED-024-YEL	BA9 LED 24VAC/DC YELLOW	\$ 14.40
BA9LED-110AC-AMB	BA9 LED 110V AC AMBER	\$ 14.40
BA9LED-110AC-GRN	BA9 LED 110V AC GREEN	\$ 19.10
BA9LED-110AC-RED	BA9 LED 110V AC RED	\$ 14.40
BA9LED-110AC-WHI	BA9 LED 110V AC WHITE	\$ 19.10
BA9LED-110DC/AC-AMB	BA9 LED 110VAC/DC AMBER	\$ 14.40
BA9LED-110DC/AC-GRN	BA9 LED 110VAC/DC GREEN	\$ 19.10
BA9LED-110DC/AC-RED	BA9 LED 110VAC/DC RED	\$ 14.40
BA9LED-110DC/AC-WHI	BA9 LED 110VAC/DC WHITE	\$ 19.10
BA9LED-110DC/AC-YEL	BA9 LED 110VAC/DC YELLOW	\$ 14.40
BA9LED-110-YEL	BA9 LED 110V AC YELLOW	\$ 14.40
BA9LED-230-AMB	BA9 LED 230/240VAC AMBER	\$ 14.40
BA9LED-230-BLU	BA9 LED 230/240VAC BLUE	\$ 19.10
BA9LED-230-GRN	BA9 LED 230/240VAC GREEN	\$ 19.10
BA9LED-230-RED	BA9 LED 230/240VAC RED	\$ 14.40
BA9LED-230-WHI	BA9 LED 230/240VAC WHITE	\$ 19.10
BA9LED-230-YEL	BA9 LED 230/240VAC YELLOW	\$ 14.40



E10LED-006-BLU	E10 LED 6V BLUE	\$ 19.10
E10LED-006-GRN	E10 LED 6V GREEN	\$ 19.10
E10LED-006-RED	E10 LED 6V RED	\$ 14.40
E10LED-006-WHI	E10 LED 6V WHITE	\$ 19.10
E10LED-006-YEL	E10 LED 6V YELLOW	\$ 14.40
E10LED-012-BLU	E10 LED 12V BLUE	\$ 19.10
E10LED-012-GRN	E10 LED 12V GREEN	\$ 19.10
E10LED-012-RED	E10 LED 12V RED	\$ 14.40
E10LED-012-WHI	E10 LED 12V WHITE	\$ 19.10
E10LED-012-YEL	E10 LED 12V YELLOW	\$ 14.40
E10LED-024-AMB	E10 LED 24V AMBER	\$ 14.40
E10LED-024-BLU	E10 LED 24V BLUE	\$ 19.10
E10LED-024-GRN	E10 LED 24V GREEN	\$ 19.10
E10LED-024-RED	E10 LED 24V RED	\$ 14.40
E10LED-024-WHI	E10 LED 24V WHITE	\$ 19.10
E10LED-024-YEL	E10 LED 24V YELLOW	\$ 14.40
E10LED-110-AMB	E10 LED 110VAC/DC AMBER	\$ 14.40
E10LED-110-BLU	E10 LED 110VAC/DC BLUE	\$ 19.10
E10LED-110-GRN	E10 LED 110VAC/DC GREEN	\$ 19.10
E10LED-110-RED	E10 LED 110VAC/DC RED	\$ 14.40
E10LED-110-WHI	E10 LED 110VAC/DC WHITE	\$ 19.10
E10LED-230-AMB	E10 LED 230V AMBER	\$ 14.40
E10LED-230-BLU	E10 LED 230V BLUE	\$ 19.10
E10LED-230-GRN	E10 LED 230V GREEN	\$ 19.10
E10LED-230-RED	E10 LED 230V RED	\$ 14.40
E10LED-230-WHI	E10 LED 230V WHITE	\$ 19.10
E10LED-230-YEL	E10 LED 230V YELLOW	\$ 14.40


LAMPEXT-SET	LAMP EXTRACTORS, FULL SET 9 PIECES	\$ 57.30
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## Moving Iron Ammeters & Voltmeters for AC measurements

Iskra Quality European Switchboard Instruments with slide-in Scales. CL 1.5

**Model FQ 0407 90° Ammeters quadrant scale 48x48mm (cutout 45x45mm)**

Direct Connect - Stock Range

FQ0407-1A		48x48mm AMMETER QUAD SCALE M.I. 1A O/S 2A	\$ 126.90
FQ0407-5A		48x48mm AMMETER QUAD SCALE M.I. 5A O/S 10A	\$ 126.90
FQ0407-10A		48x48mm AMMETER QUAD SCALE M.I. 10A O/S 20A	\$ 126.90
FQ0407-15A		48x48mm AMMETER QUAD SCALE M.I. 15A O/S 30A	\$ 133.60
FQ0407-25A		48x48mm AMMETER QUAD SCALE M.I. 25A O/S 50A	\$ 138.90

**CT Connect - Specify Scale and CT ratio when ordering**

FQ0407-1ACT		48x48mm AMMETER QUAD SCALE M.I. 1A CT METER, 2X OVERSCALE, SCALED TO ORDER	\$ 157.40
FQ0407-5ACT		48x48mm AMMETER QUAD SCALE M.I. 5A CT METER, 2x OVERSCALE SCALED TO ORDER	\$ 157.40
FQ0407-A-NON-STD		48x48mm AMMETER QUAD SCALE M.I. SCALED TO ORDER, 0.5A UP TO 25A	\$ 197.00

**FQ0407 Scale Plates**


FQ0407-SCALE-40-5A		48x48mm SCALEPLATE, QUAD SCALE M.I. 40-80/5A	\$ 12.00
FQ0407-SCALE-50-5A		48x48mm SCALEPLATE, QUAD SCALE M.I. 50-100/5A	\$ 12.00
FQ0407-SCALE-60-5A		48x48mm SCALEPLATE, QUAD SCALE M.I. 60-120/5A	\$ 12.00
FQ0407-SCALE-100-5A		48x48mm SCALEPLATE, QUAD SCALE M.I. 100-200/5A	\$ 12.00
FQ0407-SCALE-150-5A		48x48mm SCALEPLATE, QUAD SCALE M.I. 150-300/5A	\$ 12.00
FQ0407-SCALE-200-5A		48x48mm SCALEPLATE, QUAD SCALE M.I. 200-400/5A	\$ 12.00
FQ0407-SCALE-300-5A		48x48mm SCALEPLATE, QUAD SCALE M.I. 300-600/5A	\$ 12.00

**Model FQ 0407 90° Voltmeters quadrant scale 48x48mm (cutout 45x45mm)**

FQ0407-300V		48x48mm VOLTMETER QUAD SCALE M.I. 300V	\$ 148.10
FQ0407-500V		48x48mm VOLTMETER QUAD SCALE M.I. 500V	\$ 148.10
FQ0407-V-NON-STD		48x48mm VOLTMETER, QUAD SCALE M.I. SCALED TO ORDER	\$ 202.30

**Model FQ 0307 90° Ammeters quadrant scale 72x72mm (cutout 68x68mm)**

Direct Connect - Stock Range

FQ0307-1A		72x72mm AMMETER, QUAD SCALE M.I. 1A O/S 2A	\$ 120.40
FQ0307-2.5A		72x72mm AMMETER, QUAD SCALE M.I. 2.5A O/S 5A	\$ 120.40
FQ0307-6A		72x72mm AMMETER, QUAD SCALE M.I. 6A O/S 12A	\$ 120.40
FQ0307-10A		72x72mm AMMETER, QUAD SCALE M.I. 10A O/S 20A	\$ 120.40
FQ0307-15A		72x72mm AMMETER, QUAD SCALE M.I. 15A O/S 30A	\$ 132.20
FQ0307-20A		72x72mm AMMETER, QUAD SCALE M.I. 20A O/S 40A	\$ 132.20
FQ0307-25A		72x72mm AMMETER, QUAD SCALE M.I. 25A O/S 50A	\$ 132.20
FQ0307-30A		72x72mm AMMETER, QUAD SCALE M.I. 30A O/S 60A	\$ 132.20
FQ0307-40A		72x72mm AMMETER, QUAD SCALE M.I. 40A O/S 80A	\$ 132.20
FQ0307-60A		72x72mm AMMETER, QUAD SCALE M.I. 60A O/S 120A	\$ 132.20

**CT Connect - Specify scale and CT ratio when ordering**

FQ0307-1ACT		72x72mm AMMETER, QUAD SCALE M.I. 1A CT METER SCALED	\$ 133.60
FQ0307-5ACT		72x72mm AMMETER, QUAD SCALE M.I. 5A CT METER, NO SCALE	\$ 108.40
FQ0307-A-NON-STD		72x72mm AMMETER, QUAD SCALE M.I. NON STANDARD SCALE	\$ 158.60

**FQ0307 Scale Plates**

FQ0307-SCALEPLATE		72x72mm SCALEPLATE, QUAD SCALE M.I. NON STANDARD RANGE	\$ 44.90
FQ0307-SCALE-40-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 40-80/5A	\$ 12.00
FQ0307-SCALE-50-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 50-100/5A	\$ 12.00
FQ0307-SCALE-60-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 60-120/5A	\$ 12.00
FQ0307-SCALE-100-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 100-200/5A	\$ 12.00
FQ0307-SCALE-150-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 150-300/5A	\$ 12.00
FQ0307-SCALE-200-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 200-400/5A	\$ 12.00
FQ0307-SCALE-300-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 300-600/5A	\$ 12.00
FQ0307-SCALE-400-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 400-800/5A	\$ 12.00
FQ0307-SCALE-500-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 500-1000/5A	\$ 12.00
FQ0307-SCALE-600-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 600-1200/5A	\$ 12.00
FQ0307-SCALE-800-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 800-1600/5A	\$ 12.00
FQ0307-SCALE-1000-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 1000-2000/5A	\$ 12.00
FQ0307-SCALE-1200-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 1200-2400/5A	\$ 12.00
FQ0307-SCALE-1600-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 1600-3200/5A	\$ 12.00
FQ0307-SCALE-2000-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 2000-4000/5A	\$ 12.00
FQ0307-SCALE-2500-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 2500-5000/5A	\$ 12.00
FQ0307-SCALE-3000-5A		72x72mm SCALEPLATE, QUAD SCALE M.I. 2500-5000/5A	\$ 12.00

**Model FQ 0307 90° Voltmeters quadrant scale 72x72mm (cutout 68x68mm)**

FQ0307-250V		72x72mm VOLTMETER, QUAD SCALE M.I. 250VAC	\$ 134.80
FQ0307-300V		72x72mm VOLTMETER, QUAD SCALE M.I. 300VAC	\$ 134.80
FQ0307-500V		72x72mm VOLTMETER, QUAD SCALE M.I. 500VAC	\$ 134.80
FQ0307-V-NON-STD		72x72mm VOLTMETER, QUAD SCALE M.I. SCALED TO ORDER	\$ 173.30

Spare or additional scales available - Specify rating and size when ordering

## Moving Iron Ammeters & Voltmeters for AC measurements

Iskra Quality European Switchboard Instruments with slide-in Scales. CL 1.5

Model FQ 0407 90° Ammeters quadrant scale 96x96mm (cutout 92x92mm)

FQ0207-1A	96x96mm AMMETER, QUAD SCALE M.I. 1A O/S 2A	\$ 120.40
FQ0207-2.5A	96x96mm AMMETER, QUAD SCALE M.I. 2.5A O/S 5A	\$ 120.40
FQ0207-6A	96x96mm AMMETER, QUAD SCALE M.I. 6A O/S 12A	\$ 120.40
FQ0207-10A	96x96mm AMMETER, QUAD SCALE M.I. 10A O/S 20A	\$ 125.60
FQ0207-15A	96x96mm AMMETER, QUAD SCALE M.I. 15A O/S 30A	\$ 132.20
FQ0207-20A	96x96mm AMMETER, QUAD SCALE M.I. 20A O/S 40A	\$ 132.20
FQ0207-25A	96x96mm AMMETER, QUAD SCALE M.I. 25A O/S 50A	\$ 132.20
FQ0207-30A	96x96mm AMMETER, QUAD SCALE M.I. 30A O/S 60A	\$ 132.20
FQ0207-40A	96x96mm AMMETER, QUAD SCALE M.I. 40A O/S 80A	\$ 132.20
FQ0207-60A	96x96mm AMMETER, QUAD SCALE M.I. 60A O/S 120A	\$ 136.20



CT Connect - Specify scale and CT ratio when ordering

FQ0207-1ACT	96x96mm AMMETER, QUAD SCALE M.I.1A CT METER SCALED	\$ 133.60
FQ0207-5ACT	96x96mm AMMETER, QUAD SCALE M/IRON 5A CT METER, NO SCALE	\$ 108.40
FQ0207-A-NON-STD	96x96mm AMMETER, QUAD SCALE M.I. SCALED TO ORDER	\$ 158.60

FQ0207 Scale Plates

FQ0207-SCALEPLATE	96x96mm SCALEPLATE, QUAD SCALE M.I. NON STANDARD RANGE	\$ 44.90
FQ0207-SCALE-40-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 40-80/5A	\$ 12.00
FQ0207-SCALE-50-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 50-100/5A	\$ 12.00
FQ0207-SCALE-60-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 60-120/5A	\$ 12.00
FQ0207-SCALE-100-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 100-200/5A	\$ 12.00
FQ0207-SCALE-150-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 150-300/5A	\$ 12.00
FQ0207-SCALE-200-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 200-400/5A	\$ 12.00
FQ0207-SCALE-300-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 300-600/5A	\$ 12.00
FQ0207-SCALE-400-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 400-800/5A	\$ 12.00
FQ0207-SCALE-500-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 500-1000/5A	\$ 12.00
FQ0207-SCALE-600-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 600-1200/5A	\$ 12.00
FQ0207-SCALE-800-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 800-1600/5A	\$ 12.00
FQ0207-SCALE-1000-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 1000-2000/5A	\$ 12.00
FQ0207-SCALE-1200-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 1200-2400/5A	\$ 12.00
FQ0207-SCALE-1600-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 1600-3200/5A	\$ 12.00
FQ0207-SCALE-2000-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 2000-4000/5A	\$ 12.00
FQ0207-SCALE-2500-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 2500-5000/5A	\$ 12.00
FQ0207-SCALE-3000-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 3000-6000/5A	\$ 12.00

Modifications-Design Surcharges for all FQ0x07 Meters

METER-EXTRA1	CHARGE FOR DUAL SCALING	\$ 52.90
METER-EXTRA5	CHARGE FOR COLOURED LINE AT	\$ 14.60
METER-EXTRA7	CHARGE FOR COLOURED BAND (PER BAND)	\$ 22.50
METER-EXTRA8	CHARGE FOR NON-REFL GLASS C/W ZERO ADJ	\$ 22.50

CROMPTON Switchboard Instruments with slide in Scales. CL 1.5

Model 242 90° quadrant scale Ammeters 48x48mm (cutout 45x45mm)

242-756G-1A	48x48mm AMMETER QUAD SCALE M.I. 1A O/S 6A	\$ 112.40
242-756G-5A	48x48mm AMMETER QUAD SCALE M.I. 5A O/S 30A	\$ 112.40
242-756G-10A	48x48mm AMMETER QUAD SCALE M.I. 5A O/S 10A	\$ 182.40
242-756G-15A	48x48mm AMMETER QUAD SCALE M.I. 15A O/S 90A	\$ 112.40

Ammeters CT Connect - Stock Range

242-756G-1A	48x48mm AMMETER QUAD SCALE M.I. 1A O/S 6A	\$ 112.40
242-756G-5A	48x48mm AMMETER QUAD SCALE M.I. 5A O/S 30A	\$ 112.40

Model 242 Scale Plates

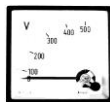
242-SCALE-40A	48x48mm SCALEPLATE, QUAD SCALE M.I. 40/5A - 240A O/S	\$ 15.00
242-SCALE-60A	48x48mm SCALEPLATE, QUAD SCALE M.I. 60/5A -360A O/S	\$ 15.00
242-SCALE-100A	48x48mm SCALEPLATE, QUAD SCALE M.I. 100/5A - 600A O/S	\$ 15.00
242-SCALE-150A	48x48mm SCALEPLATE, QUAD SCALE M.I. 150/5A - 750A O/S	\$ 15.00
242-SCALE-200A	48x48mm SCALEPLATE, QUAD SCALE M.I. 200/5A - 1.2KA O/S	\$ 15.00
242-SCALE-300A	48x48mm SCALEPLATE, QUAD SCALE M.I. 300/5A - 1.8KA O/S	\$ 15.00
242-SCALE-400A	48x48mm SCALEPLATE, QUAD SCALE M.I. 400/5A - 2.4KA O/S	\$ 15.00
242-SCALE-500A	48x48mm SCALEPLATE, QUAD SCALE M.I. 500/5A - 3KA O/S	\$ 15.00
242-SCALE-600A	48x48mm SCALEPLATE, QUAD SCALE M.I. 600/5A - 3.6KA O/S	\$ 15.00
242-SCALE-800A	48x48mm SCALEPLATE, QUAD SCALE M.I. 800/5A - 4.8KA O/S	\$ 15.00
242-SCALE-1000A	48x48mm SCALEPLATE, QUAD SCALE M.I. 1000/5A - 6KA O/S	\$ 15.00
242-SCALE-1200A	48x48mm SCALEPLATE, QUAD SCALE M.I. 1200/5A - 7.2KA O/S	\$ 15.00
242-SCALE-1600A	48x48mm SCALEPLATE, QUAD SCALE M.I. 1600/5A - 9.6KA O/S	\$ 15.00
242-SCALE-2000A	48x48mm SCALEPLATE, QUAD SCALE M.I. 2000/5A - 12KA O/S	\$ 15.00
242-SCALE-2500A	48x48mm SCALEPLATE, QUAD SCALE M.I. 2500/5A - 15KA O/S	\$ 15.00
242-SCALE-3000A	48x48mm SCALEPLATE, QUAD SCALE M.I. 3000/5A - 18KA O/S	\$ 15.00

Voltmeters

242-75VG-150V	48x48mm VOLTMETER QUAD SCALE M.I. 150VAC	\$ 128.30
242-75VG-300V	48x48mm VOLTMETER QUAD SCALE M.I. 300VAC	\$ 128.30
242-75VG-500V	48x48mm VOLTMETER QUAD SCALE M.I. 500VAC	\$ 128.30

Model 243 90° Ammeters quadrant scale 72x72mm (cutout 68x68mm)

243-026G-1A	72x72mm AMMETER QUAD SCALE M.I.1A O/S 6A	\$ 105.80
243-026G-5A	72x72mm AMMETER QUAD SCALE M.I. 5A O/S 30A	\$ 105.80
243-026G-10A	72x72mm AMMETER QUAD SCALE M.I.10A O/S 60A	\$ 105.80
243-026G-15A	72x72mm AMMETER QUAD SCALE M.I.15A O/S 90A	\$ 105.80
243-026G-20A	72x72mm AMMETER QUAD SCALE M.I.20A O/S 120A	\$ 105.80
243-026G-30A	72x72mm AMMETER QUAD SCALE M.I.2A O/S 12A	\$ 105.80
243-026G-40A	72x72mm AMMETER QUAD SCALE M.I.3A O/S 18A	\$ 105.80
243-026G-60A	72x72mm AMMETER QUAD SCALE M.I. 60A O/S 360A	\$ 191.70



Ammeters CT Connect - Stock Range

243-026G-1A	72x72mm AMMETER QUAD SCALE M.I.1A O/S 6A	\$ 105.80
243-026G-5A	72x72mm AMMETER QUAD SCALE M.I. 5A O/S 30A	\$ 105.80

## Moving Iron Ammeters & Voltmeters for AC measurements

### Model 243 Scale Plates

243-SCALE-40A	72x72mm SCALEPLATE, QUAD SCALE M.I. 40/5A - 240A O/S	\$ 34.00
243-SCALE-60A	72x72mm SCALEPLATE, QUAD SCALE M.I. 60/5A - 360A O/S	\$ 34.00
243-SCALE-100A	72x72mm SCALEPLATE, QUAD SCALE M.I. 100/5A - 600A O/S	\$ 34.00
243-SCALE-150A	72x72mm SCALEPLATE, QUAD SCALE M.I. 150/5A - 750A O/S	\$ 34.00
243-SCALE-200A	72x72mm SCALEPLATE, QUAD SCALE M.I. 200/5A - 1200A O/S	\$ 34.00
243-SCALE-300A	72x72mm SCALEPLATE, QUAD SCALE M.I. 300/5A - 1.8KA O/S	\$ 34.00
243-SCALE-400A	72x72mm SCALEPLATE, QUAD SCALE M.I. 400/5A - 2.4KA O/S	\$ 34.00
243-SCALE-500A	72x72mm SCALEPLATE, QUAD SCALE M.I. 500/5A - 3KA O/S	\$ 34.00
243-SCALE-600A	72x72mm SCALEPLATE, QUAD SCALE M.I. 600/5A - 3.6KA O/S	\$ 34.00
243-SCALE-800A	72x72mm SCALEPLATE, QUAD SCALE M.I. 800/5A - 4.8K O/S	\$ 34.00
243-SCALE-1000A	72x72mm SCALEPLATE, QUAD SCALE M.I. 1000/5A - 6KA O/S	\$ 34.00
243-SCALE-1200A	72x72mm SCALEPLATE, QUAD SCALE M.I. 1200/5A - 7.2KA O/S	\$ 34.00
243-SCALE-1600A	72x72mm SCALEPLATE, QUAD SCALE M.I. 1600/5A - 9.6KA O/S	\$ 34.00
243-SCALE-2000A	72x72mm SCALEPLATE, QUAD SCALE M.I. 2000/5A - 12KA O/S	\$ 34.00
243-SCALE-2500A	72x72mm SCALEPLATE, QUAD SCALE M.I. 2500/5A - 15KA O/S	\$ 34.00
243-SCALE-3000A	72x72mm SCALEPLATE, QUAD SCALE M.I. 3000/5A - 18KA O/S	\$ 34.00

### Voltmeters

243-02VG-150V	72x72mm VOLTMETER, QUAD SCALE, M.I. 150VAC	\$ 105.80
243-02VG-300V	72x72mm VOLTMETER, QUAD SCALE, M.I. 300VAC	\$ 105.80
243-02VG-500V	72x72mm VOLTMETER, QUAD SCALE, M.I. 500VAC	\$ 105.80

### Model 244 90° Ammeters quadrant scale 96x96mm (cutout 92x92mm)

#### Ammeters Direct Connect - Stock Range

244-026G-1A	96x96mm AMMETER QUAD SCALE M.I.1A O/S 6A	\$ 105.80
244-026G-5A	96x96mm AMMETER QUAD SCALE M.I.5A O/S 30A	\$ 105.80
244-026G-10A	96x96mm AMMETER QUAD SCALE M.I.10A O/S 60A	\$ 105.80
244-026G-15A	96x96mm AMMETER QUAD SCALE M.I.15A O/S 90A	\$ 105.80
244-026G-20A	96x96mm AMMETER QUAD SCALE M.I.20A O/S 120A	\$ 105.80
244-026G-30A	96x96mm AMMETER QUAD SCALE M.I.30A O/S 180A	\$ 105.80
244-026G-40A	96x96mm AMMETER QUAD SCALE M.I.40A O/S 240A	\$ 105.80
244-026G-60A	96x96mm AMMETER QUAD SCALE M.I. 60A O/S 360A	\$ 198.30



#### Ammeters CT Connect - Stock Range

244-026G-1A	96x96mm AMMETER QUAD SCALE M.I.1A O/S 6A	\$ 105.80
244-026G-5A	96x96mm AMMETER QUAD SCALE M.I.5A O/S 30A	\$ 105.80

### Model 244 Scale Plates

244-SCALE-40A	96x96mm SCALEPLATE, QUAD SCALE M.I. 40/5A - 240A OVERSCALE	\$ 31.20
244-SCALE-60A	96x96mm SCALEPLATE, QUAD SCALE M.I. 60/5A - 360A OVERSCALE	\$ 31.20
244-SCALE-100A	96x96mm SCALEPLATE, QUAD SCALE M.I. 100/5A - 600A OVERSCALE	\$ 31.20
244-SCALE-150A	96x96mm SCALEPLATE, QUAD SCALE M.I. 150/5A - 900A OVERSCALE	\$ 31.20
244-SCALE-200A	96x96mm SCALEPLATE, QUAD SCALE M.I. 200/5A - 1.2KA OVERSCALE	\$ 31.20
244-SCALE-300A	96x96mm SCALEPLATE, QUAD SCALE M.I. 300/5A - 1.8KA OVERSCALE	\$ 31.20
244-SCALE-400A	96x96mm SCALEPLATE, QUAD SCALE M.I. 400/5A - 2.4KA OVERSCALE	\$ 31.20
244-SCALE-500A	96x96mm SCALEPLATE, QUAD SCALE M.I. 500/5A - 3KA OVERSCALE	\$ 31.20
244-SCALE-600A	96x96mm SCALEPLATE, QUAD SCALE M.I. 600/5A - 3.6KA OVERSCALE	\$ 31.20
244-SCALE-800A	96x96mm SCALEPLATE, QUAD SCALE M.I. 800/5A - 4.8KA OVERSCALE	\$ 31.20
244-SCALE-1000A	96x96mm SCALEPLATE, QUAD SCALE M.I. 1000/5A - 6KA OVERSCALE	\$ 31.20
244-SCALE-1200A	96x96mm SCALEPLATE, QUAD SCALE M.I. 1200/5A - 7.2KA OVERSCALE	\$ 31.20
244-SCALE-1600A	96x96mm SCALEPLATE, QUAD SCALE M.I. 1600/5A - 9.6KA OVERSCALE	\$ 31.20
244-SCALE-2000A	96x96mm SCALEPLATE, QUAD SCALE M.I. 2000/5A - 12KA OVERSCALE	\$ 31.20
244-SCALE-2500A	96x96mm SCALEPLATE, QUAD SCALE M.I. 2500/5A - 15KA OVERSCALE	\$ 31.20
244-SCALE-3000A	96x96mm SCALEPLATE, QUAD SCALE M.I. 3000/5A - 15KA OVERSCALE	\$ 31.20

### Voltmeters

244-02VG-150V	96x96mm VOLTMETER QUAD SCALE, M.I.150VAC	\$ 105.80
244-02VG-300V	96x96mm VOLTMETER QUAD SCALE, M.I. 300VAC	\$ 105.80
244-02VG-500V	96x96mm VOLTMETER QUAD SCALE, M.I. 500VAC	\$ 105.80

## Economy Moving Iron Ammeters & Voltmeters for AC measurements

CEQ35 Ammeters, 48x48mm, quadrant scale DIN Rail mount. CI 1.5

CEQ35-5A	48x48mm AMMETER, DIN RAIL MOUNT M.I.10A O/S 20A	\$ 99.20
CEQ35-10A	48x48mm AMMETER, DIN RAIL MOUNT M.I.10A O/S 20A	\$ 99.20
CEQ35-15A	48x48mm AMMETER, DIN RAIL MOUNT M.I.15A O/S 30A	\$ 99.20

**CT Connect - Specify scale and CT ratio when ordering**

CEQ35-5A-CT	48x48mm AMMETER, DIN RAIL MOUNT M.I. 5A CT RATIOS	\$ 92.50
CEQ35-A-NON-STD	48x48mm AMMETER, DIN RAIL MOUNT M.I. 5A NON STANDARD CT RATIOS	\$ 146.80

**CEQ35 Scale Plates**

CEQ35-SCALE-BLANK	48x48mm SCALEPLATE, BLANK	\$ 6.70
CEQ35-SCALE-100/5A	48x48mm SCALEPLATE, QUAD SCALE M.I. 100-200/5A	\$ 6.70
CEQ35-SCALE-150/5A	48x48mm SCALEPLATE, QUAD SCALE M.I. 150-300/5A	\$ 6.70
CEQ35-SCALE-200/5A	48x48mm SCALEPLATE, QUAD SCALE M.I. 200-400/5A	\$ 6.70
CEQ35-SCALE-300/5A	48x48mm SCALEPLATE, QUAD SCALE M.I. 300-600/5A	\$ 6.70
CEQ35-SCALE-400/5A	48x48mm SCALEPLATE, QUAD SCALE M.I. 400-800/5A	\$ 6.70
CEQ35-SCALE-600/5A	48x48mm SCALEPLATE, QUAD SCALE M.I. 600-1200/5A	\$ 6.70
CEQ35-SCALE-800/5A	48x48mm SCALEPLATE, QUAD SCALE M.I. 800-1600/5A	\$ 6.70
CEQ35-SCALE-1000/5A	48x48mm SCALEPLATE, QUAD SCALE M.I. 1000-2000/5A	\$ 6.70
CEQ35-SCALE-1200/5A	48x48mm SCALEPLATE, QUAD SCALE M.I. 1200-2400/5A	\$ 6.70
CEQ35-SCALE-1600/5A	48x48mm SCALEPLATE, QUAD SCALE M.I. 1600-3200/5A	\$ 6.70



**Model CEQ35 Voltmeter, 48x48mm quadrant scale DIN Rail mount. CI 1.5**

CEQ35-300V	48x48MM VOLTMETER DIN RAIL MOUNT M.I. 0-300V	\$ 99.20
CEQ35-500V	48x48MM VOLTMETER DIN RAIL MOUNT M.I. 0-500V	\$ 99.20

**Model CEQ35 Frequency meter, 48x48mm quadrant scale DIN Rail mount.**

ZQ35-230V-45-55HZ	DIN RAIL FREQUENCY METER 45-55HZ/230V	\$ 99.20
ZQ35-400V-45-55HZ	DIN RAIL FREQUENCY METER 45-55HZ/400V	\$ 99.20

**Model CEQ72 Ammeters, 72x72mm quadrant scale**

CEQ72-1A	72x72mm AMMETER, QUAD SCALE M.I. 1A O/S 2A	\$ 99.20
CEQ72-2.5A	72x72mm AMMETER, QUAD SCALE M.I. 2.5A O/S 5A	\$ 99.20
CEQ72-5A	72x72mm AMMETER, QUAD SCALE M.I. 5A O/S 10A	\$ 99.20
CEQ72-6A	72x72mm AMMETER, QUAD SCALE M.I. 6A O/S 12A	\$ 99.20
CEQ72-10A	72x72mm AMMETER, QUAD SCALE M.I. 10A O/S 20A	\$ 99.20
CEQ72-15A	72x72mm AMMETER, QUAD SCALE M.I. 15A O/S 30A	\$ 99.20
CEQ72-20A	72x72mm AMMETER, QUAD SCALE M.I. 20A O/S 40A	\$ 99.20
CEQ72-30A	72x72mm AMMETER, QUAD SCALE M.I. 30A O/S 60A	\$ 99.20
CEQ72-50A	72x72mm AMMETER, QUAD SCALE M.I. 50A O/S 100A	\$ 99.20
CEQ72-100A	72x72mm AMMETER, QUAD SCALE M.I. 100A O/S 200A	\$ 99.20



**CT Connect - Specify scale and CT ratio when ordering**

CEQ72-1ACT	72x72mm AMMETER, QUAD SCALE M.I. 1A CT RATIO SCALEPLATE	\$ 112.40
CEQ72-5ACT	72x72mm AMMETER, QUAD SCALE M.I. 5A CT RATIO SCALEPLATE	\$ 92.50
CEQ72-A-NON-STD	72x72mm AMMETER, QUAD SCALE M.I. NON STANDARD SCALE	\$ 146.80

**CEQ72 Scale Plates**

CEQ72-SCALE-NON-STD	SCALED FOR NON STOCK RANGE	\$ 44.90
CEQ72-SCALE-30-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 30-60/5A	\$ 6.70
CEQ72-SCALE-40-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 40-80/5A	\$ 6.70
CEQ72-SCALE-50-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 50-100/5A	\$ 6.70
CEQ72-SCALE-60-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 60-120/5A	\$ 6.70
CEQ72-SCALE-75-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 75-150/5A	\$ 6.70
CEQ72-SCALE-100-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 100-200/5A	\$ 6.70
CEQ72-SCALE-150-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 150-300/5A	\$ 6.70
CEQ72-SCALE-200-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 200-400/5A	\$ 6.70
CEQ72-SCALE-250-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 200-500/5A	\$ 6.70
CEQ72-SCALE-300-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 300-600/5A	\$ 6.70
CEQ72-SCALE-400-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 400-800/5A	\$ 6.70
CEQ72-SCALE-500-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 500-1000/5A	\$ 6.70
CEQ72-SCALE-600-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 600-1200/5A	\$ 6.70
CEQ72-SCALE-800-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 800-1600/5A	\$ 6.70
CEQ72-SCALE-1000-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 1000-2000/5A	\$ 6.70
CEQ72-SCALE-1200-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 1200-2400/5A	\$ 6.70
CEQ72-SCALE-1600-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 1600-3200/5A	\$ 6.70
CEQ72-SCALE-2000-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 2000-4000/5A	\$ 6.70
CEQ72-SCALE-3000-5A	72x72mm SCALEPLATE, QUAD SCALE M.I. 3000-6000/5A	\$ 6.70

**Model CEQ72 90° Voltmeters quadrant scale 72x72mm (cutout 68x68mm)**

CEQ72-250V	72x72mm VOLTMETER, QUAD SALE M.I., 250VAC	\$ 99.20
CEQ72-500V	72x72mm VOLTMETER, QUAD SALE M.I., 500VAC	\$ 99.20
CEQ72-V-NON-STD	72x72 M/IRON VOLTMETER SCALED TO ORDER	\$ 142.80
FQ0307-V-NON-STD	72x72mm VOLTMETER, QUAD SCALE M.I. SCALED TO ORDER	\$ 173.30

**Model CEQ96 90° Ammeters quadrant scale 96x96mm (cutout 92x92mm)**

CEQ96-1A	96x96mm AMMETER, QUAD SCALE M.I. 1A O/S 2A	\$ 99.20
CEQ96-2.5A	96x96mm AMMETER, QUAD SCALE M.I. 2.5A O/S 5A	\$ 99.20
CEQ96-5A	96x96mm AMMETER, QUAD SCALE M.I. 5A O/S 10A	\$ 99.20
CEQ96-10A	96x96mm AMMETER, QUAD SCALE M.I. 10A O/S 20A	\$ 99.20
CEQ96-15A	96x96mm AMMETER, QUAD SCALE M.I. 15A O/S 30A	\$ 99.20
CEQ96-20A	96x96mm AMMETER, QUAD SCALE M.I. 20A O/S 40A	\$ 99.20
CEQ96-30A	96x96mm AMMETER, QUAD SCALE M.I. 30A O/S 60A	\$ 99.20
CEQ96-50A	96x96mm AMMETER, QUAD SCALE M.I. 50A O/S 100A	\$ 99.20
CEQ96-100A	96x96mm AMMETER, QUAD SCALE M.I. 100A O/S 200A	\$ 99.20



**CT Connect - Specify scale and CT ratio when ordering**

CEQ96-1ACT	96x96mm AMMETER, QUAD SCALE M.I. 5A CT RATIO SCALEPLATE	\$ 112.40
CEQ96-5ACT	96x96mm AMMETER, QUAD SCALE M.I. 5A CT RATIO SCALEPLATE	\$ 92.50
CEQ96-A-NON-STD	96x96mm AMMETER, QUAD SCALE M.I. NON STANDARD SCALE	\$ 146.80



## Economy Moving Iron Ammeters & Voltmeters for AC measurements

### CEQ96 Scale Plates

CEQ96-SCALE-NON-STD	SCALED FOR NON STOCK RANGE	\$ 44.90
CEQ96-SCALE-BLANK	96x96mm BLANK SCALEPLATE	\$ 13.20
CEQ96-SCALE-30-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 30-60A	\$ 6.70
CEQ96-SCALE-40-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 40-80/5A	\$ 6.70
CEQ96-SCALE-60-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 50-100/5A	\$ 6.70
CEQ96-SCALE-75-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 75-150/5A	\$ 6.70
CEQ96-SCALE-100-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 100-200/5A	\$ 6.70
CEQ96-SCALE-150-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 150-300/5A	\$ 6.70
CEQ96-SCALE-200-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 200-400/5A	\$ 6.70
CEQ96-SCALE-250-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 250-500/5A	\$ 6.70
CEQ96-SCALE-300-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 300-600/5A	\$ 6.70
CEQ96-SCALE-400-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 400-800/5A	\$ 6.70
CEQ96-SCALE-500-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 500-1000/5A	\$ 6.70
CEQ96-SCALE-600-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 600-1200/5A	\$ 6.70
CEQ96-SCALE-800-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 800-1600/5A	\$ 6.70
CEQ96-SCALE-1000-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 1000-2000/5A	\$ 6.70
CEQ96-SCALE-1200-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 1200-2400/5A	\$ 6.70
CEQ96-SCALE-1600-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 1600-3200/5A	\$ 6.70
CEQ96-SCALE-2000-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 2000-400/5A	\$ 6.70
CEQ96-SCALE-3000-5A	96x96mm SCALEPLATE, QUAD SCALE M.I. 3000-6000/5A	\$ 6.70

### Model CEQ96 90° Voltmeters quadrant scale 96x96mm (cutout 92x92mm)

CEQ96-250V	96x96mm VOLTMETER, QUAD SCALE M.I. 250V	\$ 99.20
CEQ96-500V	96x96mm VOLTMETER, QUAD SCALE M.I. 500V	\$ 99.20
CEQ96-V-NON-STD	96x96mm M/IRON VOLTMETER SCALED TO ORDER	\$ 142.80

### IP65 Rated Kits

When used in conjunction with the CEQ meters, an IP65 rating can be achieved. Comprises a faceplate, cover and bezel gasket.

CEQ-IP65-KIT-72	IP65 KIT FOR 72x72 METERS	\$ 19.90
CEQ-IP65-KIT-96	IP65 KIT FOR 96x96 METERS	\$ 25.20

## Maximum Demand Indicators

Iskra Quality European Switchboard Instruments with slide-in Scales.

MQ Series Maximum Demand (MQ0207) and combined Maximum Demand/Moving Iron (MQ0217) Ammeters.

DIN

### Thermal Maximum Demand Ammeters, CL3

MQ0207-1ACT	96x96mm, QUAD SCALE M/IRON MDI, 1ACT, 15MIN, NO SCALEPLATE	\$ 197.00
MQ0207-5ACT	96x96mm, QUAD SCALE M/IRON MDI, 5ACT, 15MIN, NO SCALEPLATE	\$ 197.00
MQ0207-NON-STD	96x96mm, QUAD SCALE M/IRON MDI, 5ACT, 15MIN, SCALED TO ORDER	\$ 277.60

### MQ0207 Scale Plates

MQ0207-SCALE-60-5A	96x96mm, MQ0207 SCALEPLATE 60/72/5A	\$ 12.00
MQ0207-SCALE-100-5A	96x96mm, MQ0207 SCALEPLATE 100/120/5A	\$ 12.00
MQ0207-SCALE-150-5A	96x96mm, MQ0207 SCALEPLATE 150/180/5A	\$ 12.00
MQ0207-SCALE-200-5A	96x96mm, MQ0207 SCALEPLATE 200/240/5A	\$ 12.00
MQ0207-SCALE-250-5A	96x96mm, MQ0207 SCALEPLATE 250/300/5A	\$ 12.00
MQ0207-SCALE-300-5A	96x96mm, MQ0207 SCALEPLATE 300/360/5A	\$ 12.00
MQ0207-SCALE-400-5A	96x96mm, MQ0207 SCALEPLATE 400/480/5A	\$ 12.00
MQ0207-SCALE-500-5A	96x96mm, MQ0207 SCALEPLATE 500/600/5A	\$ 12.00
MQ0207-SCALE-600-5A	96x96mm, MQ0207 SCALEPLATE 600/720/5A	\$ 12.00
MQ0207-SCALE-800-5A	96x96mm, MQ0207 SCALEPLATE 800/960/5A	\$ 12.00
MQ0207-SCALE-1000-5A	96x96mm, MQ0207 SCALEPLATE 1000/1200/5A	\$ 12.00
MQ0207-SCALE-1200-5A	96x96mm, MQ0207 SCALEPLATE 1200/1440/5A	\$ 12.00
MQ0207-SCALE-1500-5A	96x96mm, MQ0207 SCALEPLATE 1500/1800/5A	\$ 12.00
MQ0207-SCALE-1600-5A	96x96mm, MQ0207 SCALEPLATE 1600/1920/5A	\$ 12.00
MQ0207-SCALE-2000-5A	96x96mm, MQ0207 SCALEPLATE 2000/2400/5A	\$ 12.00
MQ0207-SCALE-3000-5A	96x96mm, MQ0207 SCALEPLATE 3000/3600/5A	\$ 12.00



### Combined Maximum Demand CL3 and Moving Iron Ammeter CL1.5

MQ0217-5ACT	96x96mm QUAD SCALE M/IRON COMBINED MDI/AMMETER, 5ACT, 15MIN, NO SCALEPLATE	\$ 280.20
MQ0217-NON-STD	96x96mm QUAD SCALE M/IRON COMBINED MDI/AMMETER, SCALED TO ORDER	\$ 372.80

### MQ0217 Scale Plates

MQ0217-SCALE-60-5A	96x96mm, MQ0217 SCALEPLATE 60-72/60-120/5A	\$ 12.00
MQ0217-SCALE-100-5A	96x96mm, MQ0217 100-120/100-200/5A (96mm)	\$ 12.00
MQ0217-SCALE-150-5A	96x96mm, MQ0217 SCALEPLATE 150-180/150-300/5A	\$ 12.00
MQ0217-SCALE-200-5A	96x96mm, MQ0217 SCALEPLATE 200-240/200-400/5A	\$ 12.00
MQ0217-SCALE-300-5A	96x96mm, MQ0217 SCALEPLATE 300-360/300-600/5A	\$ 12.00
MQ0217-SCALE-400-5A	96x96mm, MQ0217 SCALEPLATE 400-480/400-800/5A	\$ 12.00
MQ0217-SCALE-500-5A	96x96mm, MQ0217 SCALEPLATE 500-600/500-1000/5A	\$ 12.00
MQ0217-SCALE-600-5A	96x96mm, MQ0217 SCALEPLATE 600-720/600-1200/5A	\$ 12.00
MQ0217-SCALE-800-5A	96x96mm, MQ0217 SCALEPLATE 800-960/800-1600/5A	\$ 12.00
MQ0217-SCALE-1000-5A	96x96mm, MQ0217 SCALEPLATE 1000-1200/1000-2000/5A	\$ 12.00
MQ0217-SCALE-1200-5A	96x96mm, MQ0217 SCALEPLATE 1200-1440/1200-2400/5A	\$ 12.00
MQ0217-SCALE-1500-5A	96x96mm, MQ0217 SCALEPLATE 1500-1800/1500-3000/5A	\$ 12.00
MQ0217-SCALE-1600-5A	96x96mm, MQ0217 SCALEPLATE 1600-1920/1600-3200/5A	\$ 12.00
MQ0217-SCALE-2000-5A	96x96mm, MQ0217 SCALEPLATE 2000-2400/2000-4000/5A	\$ 12.00
MQ0217-SCALE-3000-5A	96x96mm, MQ0217 SCALEPLATE 3000-3600/3000-6000/5A	\$ 12.00



### Rishab Maximum Demand Indicators

Available in 72 x 72mm or 96 x 96mm with MDI only or combined MDI/Ammeter in the 96 x 96mm version.

Maximum

### Thermal Maximum Demand Indicators, 72 x 72mm, CL3

BIQ72-5A	MDI METER 72mm 5A INPUT WITHOUT SCALE	\$ 207.20
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### MQ0207 Scale Plates

BIQ72-SCALE-60-5A	72x72mm, BIQ72 SCALEPLATE 60/5A 15MIN	\$ 6.70
BIQ72-SCALE-100-5A	72x72mm, BIQ72 SCALEPLATE 100/5A 15MIN	\$ 6.70
BIQ72-SCALE-150-5A	72x72mm, BIQ72 SCALEPLATE 150/5A 15MIN	\$ 6.70
BIQ72-SCALE-200-5A	72x72mm, BIQ72 SCALEPLATE 200/5A 15MIN	\$ 6.70
BIQ72-SCALE-250-5A	72x72mm, BIQ72 SCALEPLATE 250/5A 15MIN	\$ 6.70
BIQ72-SCALE-300-5A	72x72mm, BIQ72 SCALEPLATE 300/5A 15MIN	\$ 6.70
BIQ72-SCALE-400-5A	72x72mm, BIQ72 SCALEPLATE 400/5A 15MIN	\$ 6.70
BIQ72-SCALE-500-5A	72x72mm, BIQ72 SCALEPLATE 500/5A 15MIN	\$ 6.70
BIQ72-SCALE-600-5A	72x72mm, BIQ72 SCALEPLATE 600/5A 15MIN	\$ 6.70
BIQ72-SCALE-800-5A	72x72mm, BIQ72 SCALEPLATE 800/5A 15MIN	\$ 6.70
BIQ72-SCALE-1200-5A	72x72mm, BIQ72 SCALEPLATE 1200/5A 15MIN	\$ 6.70
BIQ72-SCALE-1500-5A	72x72mm, BIQ72 SCALEPLATE 1500/5A 15MIN	\$ 6.70
BIQ72-SCALE-1600-5A	72x72mm, BIQ72 SCALEPLATE 1600/5A 15MIN	\$ 6.70
BIQ72-SCALE-2000-5A	72x72mm, BIQ72 SCALEPLATE 2000/5A 15MIN	\$ 6.70
BIQ72-SCALE-2500-5A	72x72mm, BIQ72 SCALEPLATE 2500/5A 15MIN	\$ 6.70
BIQ72-SCALE-3000-5A	72x72mm, BIQ72 SCALEPLATE 3000/5A 15MIN	\$ 6.70



### Thermal Maximum Demand Indicators, 96 x 96mm, CL3

BIQ96-5A	96x96mm, MDI METER, 5A INPUT - WITHOUT SCALE	\$ 207.20
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### MQ0207 Scale Plates

BIQ96-SCALE-60-5A	96x96mm, BIQ96 SCALEPLATE 60/5A 15MIN	\$ 6.70
BIQ96-SCALE-100-5A	96x96mm, BIQ96 SCALEPLATE 100/5A 15MIN	\$ 6.70
BIQ96-SCALE-150-5A	96x96mm, BIQ96 SCALEPLATE 150/5A 15MIN	\$ 6.70
BIQ96-SCALE-200-5A	96x96mm, BIQ96 SCALEPLATE 200/5A 15MIN	\$ 6.70
BIQ96-SCALE-300-5A	96x96mm, BIQ96 SCALEPLATE 300/5A 15MIN	\$ 6.70
BIQ96-SCALE-400-5A	96x96mm, BIQ96 SCALEPLATE 400/5A 15MIN	\$ 6.70
BIQ96-SCALE-500-5A	96x96mm, BIQ96 SCALEPLATE 500/5A 15MIN	\$ 6.70
BIQ96-SCALE-600-5A	96x96mm, BIQ96 SCALEPLATE 600/5A 15MIN	\$ 6.70
BIQ96-SCALE-800-5A	96x96mm, BIQ96 SCALEPLATE 800/5A 15MIN	\$ 6.70
BIQ96-SCALE-1200-5A	96x96mm, BIQ96 SCALEPLATE 1200/5A 15MIN	\$ 6.70
BIQ96-SCALE-1500-5A	96x96mm, BIQ96 SCALEPLATE 1500/5A 15MIN	\$ 6.70
BIQ96-SCALE-1600-5A	96x96mm, BIQ96 SCALEPLATE 1600/5A 15MIN	\$ 6.70
BIQ96-SCALE-2000-5A	96x96mm, BIQ96 SCALEPLATE 2000/5A 15MIN	\$ 6.70
BIQ96-SCALE-2500-5A	96x96mm, BIQ96 SCALEPLATE 2500/5A 15MIN	\$ 6.70
BIQ96-SCALE-3000-5A	96x96mm, BIQ96 SCALEPLATE 3000/5A 15MIN	\$ 6.70

## Power Factor Meters

### Combined Maximum Demand CL3 and Moving Iron Ammeter CL1.5

BIEQ96-5A	96x96mm, COMBINED M.D.I./M.I. AMMETER 5A	\$	290.20
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#### BIEQ Scale Plates

BIEQ96-SCALE-60-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-100-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-150-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-200-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-300-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-400-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-500-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-600-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-800-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-1200-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-1500-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-1600-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-2000-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-2500-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70
BIEQ96-SCALE-3000-5A	96x96mm BIEQ96 SCALEPLATE ONLY	\$	6.70

#### Iskra Power Factor Meter 90° Quadrant scale, frequency meters 72 x 72mm & 96x96mm

YQ0207-110V-5A	96x96mm POWER FACTOR METER 0.5-1.0-0.5, 110VAC, BALANCED LOAD	\$	606.80
YQ0207-400V-5A	96x96mm POWER FACTOR METER 0.5-1.0-0.5, 400VAC, BALANCED LOAD	\$	606.80
YQ0207-500V-1A-MARIN	96x96mm POWER FACTOR METER 0.5-1.0-0.5, 500VAC, BALANCED LOAD	\$	606.80
YQ2307-230V-5A	72x72mm POWER FACTOR METER 0.5-1.0-0.5, 230VAC 1 PHASE, BALANCED LOAD	\$	721.90
YQ0107-400V-5A	144x144mm POWER FACTOR METER 0.5-1.0-0.5, 400VAC, BALANCED LOAD	\$	646.50
YQ2107-3B-110V-5A	144x144mm POWER FACTOR METER 0.5-1.0-0.5, LONG SCALE, 110VAC, BALANCED LOAD	\$	698.80



NOTE: Panel cutouts for above meters: 72mm - cutout 68x68mm 96mm - cutout 92x92mm 144mm - cutout 138x138mm

#### Synchrosopes, Phase Sequence Indicators

##### LED and LCD display Synchroscope 96x96mm

The unit measures the busbar (UBUSBAR) and generator (UGEN) voltages and frequencies and compares these, and also compares the phase angle relationship

SQ0214-110V-DL1000	SYNCHROSCOPE 96x96mm 110VAC, 100ms RELAY	\$	1,409.10
SQ0214-110V-DL10S0	SYNCHROSCOPE 96x96mm 110VAC, 100ms RELAY WITH STATUS OUTPUT	\$	1,409.10
SQ0214-110V-DL2000	SYNCHROSCOPE 96x96mm 110VAC, 300ms RELAY	\$	1,409.10
SQ0214-110V-DL4000	SYNCHROSCOPE 96x96mm 110VAC, CONTINUOUS RELAY	\$	1,409.10
SQ0214-110V-DL4100	SYNCHROSCOPE 96x96mm, 110VAC, CONTINUOUS RELAY, 10% DEAD BUS	\$	1,409.10
SQ0214-110V-DL4200	SYNCHROSCOPE 96x96mm, 110VAC, CONTINUOUS RELAY, 20% DEAD BUS	\$	1,409.10
SQ0214-230V-EN4000	SYNCHROSCOPE 96x96mm 230VAC L-N, CONTINUOUS RELAY	\$	1,342.00
SQ0214-400V-FL2000	SYNCHROSCOPE 96x96mm 400VAC, 300ms RELAY	\$	1,409.10
SQ0214-400V-FL4000	SYNCHROSCOPE 96x96mm 400VAC, CONTINUOUS RELAY	\$	1,409.10
SQ0214-400V-FL4200	SYNCHROSCOPE 96x96mm 400VAC, CONTINUOUS RELAY, 20% DEAD BUS	\$	1,409.10
SQ0214-400V-FL4300	SYNCHROSCOPE 96x96mm 400VAC, CONTINUOUS RELAY, 30% DEAD BUS	\$	1,409.10
SQ0214-400V-FL4400	SYNCHROSCOPE 96x96mm 400VAC, CONTINUOUS RELAY, 40% DEAD BUS	\$	1,409.10
SQ0214-440V-XL2000	SYNCHROSCOPE 96x96mm 440VAC, 300ms RELAY	\$	1,409.10
SQ0214-63V-BN4000	SYNCHROSCOPE 96x96mm 63VAC L-N, CONTINUOUS RELAY	\$	1,409.10



##### Phase Sequence Indicators 72x72 and 96x96mm

SQ0201-500V	96x96mm PHASE SEQUENCE INDICATOR 200-500VAC	\$	264.40
SQ0301-500V	72x72mm PHASE SEQUENCE INDICATOR 200-500VAC	\$	264.40



243-12PG	72x72mm PHASE SEQUENCE INDICATOR, 301-500VAC	\$	786.80
244-12PG	96x96mm PHASE SEQUENCE INDICATOR 301-500VAC	\$	786.80




## Quadrant Scale Moving Coil Meters

Iskra Quality European Switchboard Instruments with slide-in Scales. CL 1.5

Model BQ 0407 90° quadrant scale 48x48mm (cutout 45x45mm)

### Ammeters manufactured and scaled to order

BQ0407-MADC		48x48mm MILLIAMMETER, QUAD SCALE, M.C. DC SCALED TO ORDER	\$ 208.90
BQ0407-4-20MA		48x48mm MILLIAMMETER, QUAD SCALE, M.C. DC, 4-2-mA	\$ 268.40
BQ0407-ADC		48x48mm AMMETER, QUAD SCALE, M.C. DC SCALED TO ORDER	\$ 216.80
BQ0407-MVDC		48x48mm QUAD SCALE M/COIL DC MILLIVOLTMETER SCALED TO ORDER	\$ 208.90
BQ0407-MAAC		48x48mm MILLIAMMETER, QUAD SCALE, M.C. AC SCALED TO ORDER	\$ 223.50

### Voltmeters manufactured and scaled to order

BQ0407-VDC	48x48mm QUAD SCALE M/COIL DC VOLTMETER	\$ 208.90
BQ0407-VAC	48x48mm QUAD SCALE M/COIL AC VOLTMETER	\$ 208.90

Model BQ 0307 90° quadrant scale 72x72mm (cutout 68x68mm)

### Ammeters manufactured and scaled to order

BQ0307-MADC	72x72mm QUAD SCALE M/COIL DC MILLIAMMETER SCALED TO ORDER	\$ 208.90
BQ0307-4-20MA	72x72mm QUAD SCALE M/COIL 4-20mA	\$ 268.40
BQ0307-ADC-15A	72x72mm QUAD SCALE M/COIL DC AMMETER 1-15A	\$ 216.80
BQ0307-ADC-30A	72x72mm QUAD SCALE M/COIL DC AMMETER 15-30A	\$ 216.80
BQ0307-MAAC	72x72mm QUAD SCALE M/COIL AC M-AMMETER 1.2mA-1A SCALED TO ORDER	\$ 223.50
BQ0307-AAC-5A	72x72mm QUAD SCALE M/COIL AC AMMETER 1A-5A	\$ 223.50
BQ0307-AAC-40A	72x72mm QUAD SCALE M/COIL AC AMMETER >5-40A	\$ 232.60

### Voltmeters manufactured and scaled to order

BQ0307-MVDC	72x72mm QUAD SCALE M/COIL DC MILLIVOLTMETER SCALED TO ORDER	\$ 208.90
BQ0307-VDC	72x72mm VOLTMETER, QUAD SCALE, M.C. DC	\$ 208.90
BQ0307-VAC	72x72mm VOLTMETER, QUAD SCALE, M.C. AC	\$ 208.90

Model BQ 0207 90° quadrant scale 96x96mm (cutout 92x92mm)

### Ammeters manufactured and scaled to order

BQ0207-MADC		96x96mm QUAD SCALE M/COIL DC MILLIAMMETER SCALED TO ORDER	\$ 208.90
BQ0207-4-20MA		96x96mm QUAD SCALE M/COIL 4-20MA AMMETER	\$ 268.40
BQ0207-ADC-15A		96x96mm QUAD SCALE M/COIL DC AMMETER 1-15A	\$ 216.80
BQ0207-ADC-30A		96x96mm QUAD SCALE M/COIL DC AMMETER 16-30A	\$ 223.50
BQ0207-AAC-5A		96x96mm QUAD SCALE M/COIL AC AMMETER 1A-5A	\$ 223.50
BQ0207-AAC-40A		96x96mm QUAD SCALE M/COIL AC AMMETER 5-40A	\$ 232.60

### Voltmeters manufactured and scaled to order

BQ0207-MVDC	96x96mm QUAD SCALE M/COIL DC MILLIVOLTMETER SCALED TO ORDER	\$ 208.90
BQ0207-VDC	96x96mm QUAD SCALE M/COIL DC VOLTMETER	\$ 208.90
BQ0207-VAC	96x96mm QUAD SCALE M/COIL AC VOLTMETER	\$ 208.90

Model BQ 0107 90° quadrant scale 144x144mm (cutout 138x138mm)

### Ammeters manufactured and scaled to order

BQ0107-MADC	144x144mm QUAD SCALE M/COIL DC MILLIAMMETER SCALED TO ORDER	\$ 289.60
BQ0107-ADC-15A	144x144mm QUAD SCALE M/COIL DC AMMETER 1-15A	\$ 298.80
BQ0107-MAAC	144x144mm QUAD SCALE M/COIL AC MILLIAMMETER SCALED TO ORDER	\$ 304.00
BQ0107-AAC-5A	144x144mm QUAD SCALE M/COIL AC MILLIAMMETER 1-5A	\$ 304.00
BQ0107-AAC-40A	144x144mm QUAD SCALE M/COIL AC AMMETER 5A-40A	\$ 313.40

### Voltmeters manufactured and scaled to order

BQ0107-MVDC	144x144mm QUAD SCALE M/COIL MILLIVOLTMETER SCALED TO ORDER	\$ 289.60
BQ0107-VDC	144x144mm QUAD SCALE M/COIL DC VOLTMETER	\$ 289.60
BQ0107-VAC	144x144mm QUAD SCALE M/COIL AC VOLTMETER	\$ 289.60

### Special design surcharge applicable to all above models

METER-EXTRA1	CHARGE FOR DUAL SCALING	\$ 52.90
METER-EXTRA2	CHARGE FOR DIODE OVERLOAD PROTECTION	\$ 14.60
METER-EXTRA3	CHARGE FOR ZERO SUPPRESSION	\$ 59.60
METER-EXTRA4	CHARGE FOR CENTRE OR OFFSET ZERO	\$ 44.90
METER-EXTRA5	CHARGE FOR COLOURED LINE AT	\$ 14.60
METER-EXTRA6	CHARGE FOR CALIBRATION POTENTIOMETER	\$ 37.00
METER-EXTRA7	CHARGE FOR COLOURED BAND (PER BAND)	\$ 22.50
METER-EXTRA8	CHARGE FOR NON-REFL GLASS C/W ZERO ADJ	\$ 22.50
METER-EXTRA11	CHARGE COMPRESSED O/LOAD SCALING (AC)	\$ 59.60

### Accessories

ZZ89223285	CURRENT TRANSFORMER CT10-3-L 12mm BORE	\$ 32.70
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## Long Scale Moving Coil Meters

Iskra Quality European Switchboard Instruments with 240° Movement & slide-in Scales. CL 1.5

Model BQ 2407 240° long scale 48x48mm (cutout 45x45mm)

### Ammeters manufactured and scaled to order

BQ2407-MADC	48x48mm	LONG SCALE M/COIL DC AMMETER SCALED TO ORDER	\$ 367.50
BQ2407-ADC	48x48mm	LONG SCALE M/COIL DC AMMETER	\$ 367.50
BQ2407-MAAC	48x48mm	LONG SCALE M/COIL AC AMMETER 1.2mA-1A SCALED TO ORDER	\$ 372.80

### Voltmeters manufactured and scaled to order

BQ2407-MVDC	48x48mm	LONG SCALE M/COIL DC MILLIVOLTMETER SCALED TO ORDER	\$ 367.50
BQ2407-VDC	48x48mm	LONG SCALE M/COIL DC VOLTMETER	\$ 367.50
BQ2407-VAC	48x48mm	LONG SCALE M/COIL AC VOLTMETER	\$ 367.50

Model BQ 2307 240° long scale 72x72mm (cutout 68x68mm)

### Ammeters manufactured and scaled to order

BQ2307-MADC	72x72mm	LONG SCALE M/COIL DC MA AMMETER SCALED TO ORDER	\$ 367.50
BQ2307-4-20MA	72x72mm	LONG SCALE M/COIL 4-20mA AMMETER	\$ 427.00
BQ2307-ADC-15A	72x72mm	LONG SCALE M/COIL DC AMMETER 1-15A	\$ 367.50
BQ2307-ADC-30A	72x72mm	LONG SCALE M/COIL DC AMMETER 16-30A	\$ 367.50
BQ2307-MAAC	72x72mm	LONG SCALE M/COIL AC AMMETER 1.2mA-1A SCALED TO ORDER	\$ 427.00
BQ2307-AAC-5A	72x72mm	LONG SCALE M/COIL AC AMMETER 1A-5A	\$ 382.10
BQ2307-AAC-40A	72x72mm	LONG SCALE M/COIL AC AMMETER 5-40A	\$ 382.10



### Voltmeters manufactured and scaled to order

BQ2307-MVDC	72x72mm	LONG SCALE M/COIL DC MILLIVOLTMETER SCALED TO ORDER	\$ 367.50
BQ2307-VDC	72x72mm	LONG SCALE M/COIL DC VOLTMETER	\$ 367.50
BQ2307-VAC	72x72mm	LONG SCALE M/COIL AC VOLTMETER	\$ 367.50

Model BQ 0207 90° quadrant scale 96x96mm (cutout 92x92mm)

### Ammeters manufactured and scaled to order

BQ2207-MADC	96x96mm	LONG SCALE M/COIL DC MA AMMETER SCALED TO ORDER	\$ 367.50
BQ2207-4-20MA	96x96mm	LONG SCALE M/COIL 4-20MA AMMETER	\$ 427.00
BQ2207-ADC-15A	96x96mm	LONG SCALE M/COIL DC AMMETER 1-15A	\$ 367.50
BQ2207-ADC-30A	96x96mm	LONG SCALE M/COIL DC AMMETER 16-30A	\$ 372.80
BQ2207-MAAC	96x96mm	LONG SCALE M/COIL AC MA AMMETER 1.2mA-1A SCALED TO ORDER	\$ 427.00
BQ2207-AAC-5A	96x96mm	LONG SCALE M/COIL AC AMMETER 1A-5A	\$ 382.10
BQ2207-AAC-40A	96x96mm	LONG SCALE M/COIL AC AMMETER 5-40A	\$ 382.10

### Voltmeters manufactured and scaled to order

BQ2207-MVDC	96x96mm	LONG SCALE M/COIL DC MV VOLTMETER SCALED TO ORDER	\$ 367.50
BQ2207-VDC	96x96mm	LONG SCALE M/COIL DC VOLTMETER	\$ 367.50
BQ2207-VAC	96x96mm	LONG SCALE M/COIL AC VOLTMETER	\$ 367.50

Model BQ 2107 240° long scale 144x144mm (cutout 138x138mm)

### Ammeters manufactured and scaled to order

BQ2107-MADC	144x144mm	LONG SCALE M/COIL DC MA AMMETER	\$ 367.50
BQ2107-4-20MA	144x144mm	LONG SCALE M/COIL 4-20MA AMMETER	\$ 427.00
BQ2107-ADC-5A	144x144mm	LONG SCALE M/COIL DC AMMETER 5A	\$ 367.50
BQ2107-ADC-15A	144x144mm	LONG SCALE M/COIL DC AMMETER 1-15A	\$ 367.50
BQ2107-ADC-30A	144x144mm	LONG SCALE M/COIL DC AMMETER 16-30A	\$ 372.80
BQ2107-MAAC	144x144mm	LONG SCALE M/COIL AC AMMETER 1.2mA-1A	\$ 427.00
BQ2107-AAC-5A	144x144mm	LONG SCALE M/COIL AC AMMETER 1-5A	\$ 382.10
BQ2107-AAC-40A	144x144mm	LONG SCALE M/COIL AC AMMETER 5-40A	\$ 382.10

### Voltmeters manufactured and scaled to order

BQ2107-MVDC	144x144mm	LONG SCALE M/COIL DC MV VOLTMETER	\$ 367.50
BQ2107-VDC	144x144mm	LONG SCALE M/COIL DC VOLTMETER SCALED TO ORDER	\$ 367.50
BQ2107-VAC	144x144mm	LONG SCALE M/COIL AC VOLTMETER SCALED TO ORDER	\$ 367.50

### Accessories

ZZ89223285	CURRENT TRANSFORMER CT10-3-L 12mm BORE	\$ 32.70
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### AC Ammeters

Model BQ2407 48x48mm ac current meters can be supplied only as ac milliammeters (up to 1A). A separate miniature current transformer (CT10-3-L) can be supplied to make ammeters scaled up to 100A (subject to the 12.5mm CT bore).

Model BQ2307, BQ2207 and BQ2107 can be supplied as an ac ammeter with internal CT up to 5A, with connection made via the two standard M4 terminal screws. Higher current ac ammeters (>5A to 40A) have an external miniature CT (CT10-2) mounted on the back.

Connection is made by passing the cable through the 9mm hole in the CT. For ac currents >40A a separate miniature current transformer (CT10-3-L) can be supplied to make ammeters scaled up to 100A (subject to the 12.5mm CT bore).

### DE Quality ANSI Style Tautband switchboard instruments with 240° Movement. CL 1.5

#### Ammeters manufactured and scaled to order

DE110-ADC	110x110mm	LONG SCALE M.C AMMETER SCALED TO ORDER	\$ 343.70
DE110-MAAC	110x110mm	LONG SCALE M.C AMMETER 1.2mA-1A SCALED TO ORDER	\$ 366.20
DE110-AAC-10A	110x110mm	LONG SCALE M.C AMMETER 1.1-10A	\$ 388.60

#### Voltmeters manufactured and scaled to order

DE110-MVDC	110x110mm	LONG SCALE M.C VOLTMETER MV SCALED TO ORDER	\$ 343.70
DE110-VDC	110x110mm	LONG SCALE M.C VOLTMETER SCALED TO ORDER	\$ 343.70
DE110-VAC	110x110mm	LONG SCALE M.C VOLTMETER AC SCALED TO ORDER	\$ 343.70

#### Special design surcharge applicable to all above models

METER-EXTRA1	CHARGE FOR DUAL SCALING	\$ 52.90
METER-EXTRA2	CHARGE FOR DIODE OVERLOAD PROTECTION	\$ 14.60
METER-EXTRA3	CHARGE FOR ZERO SUPPRESSION	\$ 59.60
METER-EXTRA4	CHARGE FOR CENTRE OR OFFSET ZERO	\$ 44.90
METER-EXTRA5	CHARGE FOR COLOURED LINE AT	\$ 14.60
METER-EXTRA6	CHARGE FOR CALIBRATION POTENTIOMETER	\$ 37.00
METER-EXTRA7	CHARGE FOR COLOURED BAND (PER BAND)	\$ 22.50
METER-EXTRA8	CHARGE FOR NON-REFL GLASS C/W ZERO ADJ	\$ 22.50
METER-EXTRA11	CHARGE COMPRESSED O/LOAD SCALING (AC)	\$ 59.60
METER-EXTRA12	KWh METER ADDRESS (PER METER)	\$ 28.20
METER-EXTRA15	TEST CERTIFICATE ISSUED AT TIME OF REPAIR OR CALIBRATION	\$ 30.50
METER-EXTRA16	SET-UP AND CALIBRATION OF DIGITAL METER TO CUSTOMER SPEC	\$ 68.30
METER-EXTRA17	SCALEPLATE - FITTING INTO METER	\$ 2.50



Note! METER-EXTRA8 and METER-EXTRA11 surcharges do not apply to the DE-110 Meters



## CEL Horizontal Sector Scale Moving Coil Meters

DE786 SERIES General Purpose Panel Meters. CI 2.5

DE786-100MADC	78x86mm M.C. AMMETER 0-100mADC	\$ 133.80
DE786-100UADC	78x86mm M.C. AMMETER 0-100uADC	\$ 119.00
DE786-10ADC	78x86mm M.C. AMMETER 0-10ADC	\$ 133.80
DE786-15ADC	78x86mm M.C. AMMETER 0-15ADC	\$ 133.80
DE786-1ADC	78x86mm M.C. AMMETER 0-1ADC	\$ 133.80
DE786-1MA-BL	78x86mm M.C. MILLIMETER 0-1mADC BLANK SCALE	\$ 86.00
DE786-1MADC	78x86mm M.C. AMMETER 0-1mADC	\$ 138.40
DE786-20ADC	78x86mm M.C. AMMETER 0-20ADC	\$ 133.80
DE786-250VAC	78x86mm M.C. AMMETER 0-250VAC	\$ 140.50
DE786-30ADC	78x86mm M.C. AMMETER 0-30ADC	\$ 133.80
DE786-50UA	78x86mm M.C. MICROAMMETER 0-50uADC	\$ 119.00
DE786-50UA-BL	78x86mm M.C. MICROAMMETER 0-50uADC BLANK SCALE	\$ 86.00
DE786-5ADC	78x86mm M.C. AMMETER 0-5ADC	\$ 133.80
DE786-AAC-1A	78x86mm M.C. AMMETER 1.2-500mA AC	\$ 189.10
DE786-AAC-30A	78x86mm M.C. AMMETER 0.5-30AAC	\$ 216.80
DE786-ADC	78x86mm M.C. SPECIAL DC AMMETER SCALED TO ORDER	\$ 160.00
DE786-MADC	78x86mm M.C. SPECIAL MILLIAMMETER SCALED TO ORDER	\$ 157.40
DE786-UADC	78x86mm M.C. MICROAMMETER SCALED TO ORDER	\$ 157.40

DE786-250VDC	78x86mm M.C. VOLTMETER 0-250VDC	\$ 157.70
DE786-100VDC	78x86mm M.C. VOLTMETER 0-100VDC	\$ 157.60
DE786-10VDC	78x86mm M.C. VOLTMETER 0-10VDC	\$ 157.60
DE786-15VDC	78x86mm M.C. VOLTMETER 0-15VDC	\$ 157.60
DE786-16-32V	78x86mm M.C. VOLTMETER 16-32VDC	\$ 216.80
DE786-30VDC	78x86mm M.C. VOLTMETER 0-30VDC	\$ 157.80
DE786-50MV-BL	78x86mm M.C. MILLIVOLTMETER 0-50mVDC BLANK SCALE	\$ 86.00
DE786-50VDC	78x86mm M.C. VOLTMETER 0-50VDC	\$ 157.70
DE786-8-16V	78x86mm M.C. VOLTMETER 8-16VDC	\$ 216.80
DE786-MV	78x86mm M.C. MILLIVOLTMETER	\$ 157.40
DE786-VAC	78x86mm M.C. SPECIAL AC VOLTMETER SCALED TO ORDER	\$ 165.30
DE786-VDC	78x86mm M.C. SPECIAL DC VOLTMETER SCALED TO ORDER	\$ 157.60
DE786-SCALE-BLANK	BLANK SCALE PLATE FOR DE786 METER	\$ 13.20



### Horizontal Sector Scale Moving Coil Meters - CI 2.5, 90deg., 70 x 60mm

DE670-10A	70x60mm M.C. AMMETER 10ADC	\$ 63.50
DE670-1MA	70x60mm M.C. MILLIAMMETER 1mA	\$ 63.50
DE670-1MA-BL	70x60mm M.C. MILLIAMMETER 1mA BLANK SCALE	\$ 63.50
DE670-20A	70x60mm M.C. AMMETER 20ADC	\$ 63.50
DE670-50UA-BL	70x60mm M.C. MILLIAMMETER 50uA BLANK SCALE	\$ 63.50
DE670-5A	70x60mm M.C. AMMETER 5ADC	\$ 63.50
DE670-5MA	70x60mm M.C. AMMETER 5mADC	\$ 63.50
DE670-5MA-BL	70x60mm M.C. AMMETER 5mA BLANK SCALE	\$ 63.50
DE670-AAC-10A	70x60mm M.C. AMMETER 0.5-10A AC	\$ 165.30
DE670-AAC-30A	70x60mm M.C. AMMETER EXTERNAL CT 10-30A AC	\$ 165.30
DE670-ADC	70x60mm M.C. AMMETER SCALED TO ORDER	\$ 111.00
DE670-MAAC	70x60mm M.C. AC AMMETER (<500Ma) SCALED TO ORDER	\$ 123.00
DE670-MADC	70x60mm M.C. MILLI-AMMETER SCALED TO ORDER	\$ 111.00



DE670-100HZ-10V	70x60mm M.C. VOLTMETER 0-100Hz, 0-10Vdc	\$ 111.00
DE670-100HZ-20V	70x60mm M.C. VOLTMETER 0-100Hz, 0-20Vdc	\$ 111.00
DE670-10V	70x60mm M.C. VOLTMETER 10VDC	\$ 63.50
DE670-15V	70x60mm M.C. VOLTMETER 15VDC	\$ 63.50
DE670-20V	70x60mm M.C. VOLTMETER 20VDC	\$ 63.50
DE670-30V	70x60mm M.C. VOLTMETER 30VDC	\$ 63.50
DE670-50MV-BL	70x60mm M.C. MILLIVOLT METER 50mV BLANK SCALE	\$ 63.50
DE670-60HZ-10V	70x60mm M.C. VOLTMETER 0-60Hz, 0-10VDC	\$ 111.00
DE670-MVDC	70x60mm M.C. MILLIVOLTMETER SCALED TO ORDER	\$ 111.00
DE670-VAC	70x60mm M.C. AC VOLTMETER SCALED TO ORDER	\$ 120.40
DE670-VDC	70x60mm M.C. DC VOLTMETER SCALED TO ORDER	\$ 111.00
DE670-SCALE-BLANK	BLANK SCALE PLATE FOR DE670 METER	\$ 13.20

### Horizontal Sector Scale Moving Coil Meters - CI 1.5, 90deg., tautband, 120 x 100mm

DE120-1MADC-BL	120x100mm M.C. MILLIAMMETER BLANK SCALE	\$ 208.90
DE120-50UADC-BL	120x100mm M.C. MICROAMMETER BLANK SCALE	\$ 208.90
DE120-AAC	120x100mm M.C. AC AMMETER SCALED TO ORDER	\$ 282.90
DE120-ADC	120x100mm M.C. AMMETER SCALED TO ORDER	\$ 247.30
DE120-MADC	120x100mm M.C. MILLIAMMETER SCALED TO ORDER	\$ 247.30
DE120-MVDC	120x100mm M.C. MILLIVOLTMETER SCALED TO ORDER	\$ 247.30
DE120-UADC	120x100mm M.C. MICROAMMETER SCALED TO ORDER	\$ 253.80
DE120-VAC	120x100mm M.C. RECT. VOLTMETER SCALED TO ORDER	\$ 247.30
DE120-VDC	120x100mm M.C. VOLTMETER SCALED TO ORDER	\$ 247.30



## Frequency Meters

High Quality Electronic and Vibrating Reed Frequency Meters, CL 0.5

### Iskra Model ZQ2307 240° long scale 72x72mm (cutout 68x68mm)

ZQ2307-230V-45-55HZ	72x72mm, LONG SCALE FREQUENCY METER, 230VAC, 45-55Hz	\$ 388.60
ZQ2307-230V-45-65HZ	72x72mm, LONG SCALE FREQUENCY METER, 230VAC, 45-65Hz	\$ 388.60
ZQ2307-400V-45-55HZ	72x72mm, LONG SCALE FREQUENCY METER, 400VAC, 45-55Hz	\$ 388.60

### Iskra Model ZQ2207 240° long scale 96x96mm (cutout 92x92mm)

ZQ2207-230V-45-55HZ	96x96mm, LONG SCALE FREQUENCY METER, 230VAC, 45-55Hz	\$ 388.60
ZQ2207-230V-45-65HZ	96x96mm, LONG SCALE FREQUENCY METER, 230VAC, 45-65Hz	\$ 388.60
ZQ2207-400V-45-55HZ	96x96mm, LONG SCALE FREQUENCY METER, 400VAC, 45-55Hz	\$ 388.60

### Iskra Model ZQ0307 90° Quadrant scale 72x72mm (cutout 68x68mm)

ZQ0307-115V-45-55HZ	72x72mm QUAD SCALE FREQUENCY METER, 115VAC, 45-55Hz	\$ 313.40
ZQ0307-120V-45-65HZ	72x72mm QUAD SCALE FREQUENCY METER, 120VAC, 45-65Hz	\$ 313.40
ZQ0307-230V-45-55HZ	72x72mm QUAD SCALE FREQUENCY METER, 230VAC, 45-55Hz	\$ 313.40
ZQ0307-230V-45-65HZ	72x72mm QUAD SCALE FREQUENCY METER, 230VAC, 45-65Hz	\$ 313.40
ZQ0307-230V-55-65HZ	72x72mm QUAD SCALE FREQUENCY METER, 230VAC, 55-65Hz	\$ 313.40
ZQ0307-400V-45-55HZ	72x72mm QUAD SCALE FREQUENCY METER, 400VAC, 45-55Hz	\$ 313.40
ZQ0307-400V-45-65HZ	72x72mm QUAD SCALE FREQUENCY METER, 400VAC, 45-65Hz	\$ 313.40



### Iskra Model ZQ0317 90° Quadrant scale, vibrating reed type 72x72mm (cutout 68x68mm)

ZQ0317-230V-47-53HZ	72x72mm, VIBRATING REED FREQUENCY METER, 230VAC, 47-53Hz	\$ 388.60
ZQ0317-230V-57-63HZ	72x72mm, VIBRATING REED FREQUENCY METER, 230VAC, 57-63Hz	\$ 388.60

### Iskra Model ZQ0217 90° Quadrant scale, vibrating reed type 96x96mm (cutout 92x92mm)

ZQ0217-230V-47-53HZ	96x96mm, VIBRATING REED FREQUENCY METER, 230VAC, 47-53Hz	\$ 388.60
ZQ0217-400V-47-53HZ	96x96mm, VIBRATING REED FREQUENCY METER, 400VAC, 47-53Hz	\$ 388.60
ZQ0217-440V-55-65HZ	96x96mm, VIBRATING REED FREQUENCY METER, 440VAC, 55-65Hz	\$ 388.60



### Crompton Model 242 90° Quadrant scale, frequency meters 48x48mm (cutout 45x45mm)

242-41SG-110V	48x48mm FREQUENCY METER 100/125V 55/65Hz POINTER	\$ 327.30
242-41SG-230	48x48mm FREQUENCY METER 200/250V 45/55Hz POINTER	\$ 327.30
242-41SG-230/65HZ	48x48mm FREQUENCY METER 200/250V 55/65Hz POINTER	\$ 327.30

### Crompton Model 243 90° Quadrant scale, frequency meters 72x72mm (cutout 68x68mm)

243-41SG-110/400HZ	72x72mm, FREQUENCY METER, 110VAC, SCALED 380-440HZ	\$ 509.10
243-41SG-110V	72x72mm, FREQUENCY METER, 100-125VAC, 45-55Hz	\$ 142.80
243-41SG-120V/65HZ	72x72mm, FREQUENCY METER, 120VAC, 55-65Hz	\$ 396.30
243-41SG-230/400HZ	72x72mm, FREQUENCY METER, 200-250VAC, 360-440Hz	\$ 509.10
243-41SG-230/65HZ	72x72mm, FREQUENCY METER, 200-250VAC, 45-65Hz	\$ 142.80
243-41SG-230V	72x72mm, FREQUENCY METER, 200-250VAC, 45-55Hz	\$ 142.80
243-41SG-400/65HZ	72x72mm, FREQUENCY METER, 380-440VAC, 45-65Hz	\$ 142.80
243-41SGD-230V	72x72mm, FREQUENCY METER, 200-250VAC, 45-55Hz	\$ 431.10




### Crompton Model 244 90° Quadrant scale, frequency meters 96x96mm (cutout 92x92mm)

244-41D-120V	96x96mm DUAL FREQUENCY METER 45-55HZ	\$ 1,165.70
244-41D-400V	96x96mm DUAL FREQUENCY 380-440V 45-55Hz POINTER	\$ 1,165.70
244-41SG-110/65HZ	96x96mm FREQUENCY METER 100-125VAC 45-65Hz	\$ 142.80
244-41SG-110V	96x96mm FREQUENCY 100-125V 45-55Hz POINTER	\$ 142.80
244-41SG-200V/300HZ	96x96mm FREQUENCY METER 200VAC 0-300HZ	\$ 411.20
244-41SG-230V	96x96mm FREQUENCY 200-250V 45-55Hz POINTER	\$ 142.80
244-41SG-230V/65HZ	96x96mm FREQUENCY METER 200-250V 45-65Hz POINTER	\$ 142.80
244-41SG-400V	96x96mm FREQUENCY 380-440V 45-55Hz POINTER	\$ 142.80
244-41SG-400V-45/65	96x96mm FREQUENCY 380/400V 45-65Hz POINTER	\$ 142.80
244-41SG-440V-55/65	96x96mm FREQUENCY 440VAC 55-65Hz POINTER	\$ 227.60
244-41SG-480V-55/65	96x96mm FREQUENCY 480VAC 45-65Hz POINTER	\$ 227.60
244-41SGD-230V	96x96mm FREQUENCY 200-250V 45-55Hz POINTER	\$ 514.00

## Autonics Digital Panel Meters

### Autonics Multifunction Digital Panel Meter Series MX4W - Universal power supply

MX4W DIN W96 x H48 12 segment, LCD Display Multi Panel meter The MX4W series of panel meters feature programmable pre-scale, offset and scaling functions. Models are available for AC or DC, current or voltage. AC models can be programmed to measure frequency from 0.1Hz to 1200Hz. NPN or PNP output versions available. RMS or AVG values for AC measurement selectable

MX4W-A-F1		DIGITAL METER 96x48mm 0-5A AC/DC INPUT, 24-240VAC/DC NPN OUTPUT	\$ 374.10
MX4W-A-F2		DIGITAL METER 96x48mm 0-5A AC/DC INPUT, 24-240VAC/DC PNP OUTPUT	\$ 374.10
MX4W-A-FN		DIGITAL METER 96x48mm 0-5A AC/DC INPUT, 24-240VAC/DC NO O/P	\$ 193.70
MX4W-V-F1		DIGITAL METER 96x48mm 0-500V AC/DC INPUT, 24-240VAC/DC NPN OUTPUT	\$ 374.10
MX4W-V-F2		DIGITAL METER 96x48mm 0-500V AC/DC INPUT, 24-240VAC/DC PNP OUTPUT	\$ 374.10
MX4W-V-FN		DIGITAL METER 96x48mm 0-500V AC/DC INPUT, 24-240VAC/DC NO O/P	\$ 193.70

### Autonics Multifunction Digital Panel Meter Series MT4W

MT4W DIN W96 x H48 Multifunction digital panel meters The MT4W series of panel meters feature programmable pre-scale, offset and scaling functions. Models are available for AC or DC, current or voltage. AC models MT4W-AA-4N & MT4W-AV-4N can be programmed to measure frequency from 0.1Hz to 9999Hz.

MT4W-AA-41		AC AMMETER, 50mA-5A, 96x48mm,100-240Vac AUX, RELAY OUTPUT	\$ 390.00
MT4W-AA-4N		AC AMMETER, 50mA-5A, 96x48mm,100-240Vac AUX	\$ 337.10
MT4W-AAC		AC AMMETER, 96x48mm, INPUT 100mA - 5A FSD.	\$ 396.60
MT4W-AV-40		AC VOLTMETER, 96x48mm, 100-240Vac AUX, RELAY+ 4-20mA OUTPUT	\$ 435.40
MT4W-AV-41		AC VOLTMETER, 96x48mm, INPUT 1V-500V, 100-240V, RELAY OUT	\$ 474.60
MT4W-AV-4N		AC VOLTMETER, INPUT 1-500V, 100-240Vac AUX	\$ 337.10
MT4W-VAC		AC VOLTMETER, 96x48mm, INPUT 1V -500V	\$ 396.60
MT4W-DA-1N		DC AMMETER, 96x48mm, INPUT 2mA-5A, 12-24Vdc AUX	\$ 337.10
MT4W-DA-40		DC AMETER ,96x48mm, INPUT 2mA-5A, 100-240V AUX, 3xRELAYS & ANALOG OUT	\$ 462.70
MT4W-DA-4N		DC AMMETER, 96x48mm, 2mA-5A, 100-240Vac AUX	\$ 277.60
MT4W-DCA		DC AMMETER, 96x48mm, INPUT 2mA-5A	\$ 337.10
MT4W-DV-1N		DC VOLTMETER, 96x48mm, INPUT 50mV-500V,12-24Vdc AUX	\$ 337.10
MT4W-DV-40		DC VOLTMETER, 96x48mm, INPUT 50mV-500V, 100-240V AUX RELAY & ANALOG OUT	\$ 462.70
MT4W-DV-4N		DC VOLTMETER, MULTIRANGE, 96x48mm, 50mV-500V, 100-240Vac AUX	\$ 277.60
MT4W-VDC		DC VOLTMETER, 96x48mm, INPUT 50mV-500V	\$ 337.10
MT4W-MVDC		DC MILLIVOLTMETER, 96x48mm, 50mV-999mV	\$ 337.10
MT4W-FREQ		DIGITAL FREQUENCY METER, 96x48mm, 0.1Hz-9999Hz, 230VAC AUX	\$ 396.60


### Autonics Multifunction Digital Panel Meter Series MT4N

MT4N DIN W48 x H24 multifunction digital panel meters The MT4N series of panel meters feature programmable pre-scale, offset and scaling functions. Models are available for AC or DC, current or voltage. AC models MT4N-AA-EN & MT4N-AV-EN can be programmed to measure frequency from 0.1Hz to 9999Hz

MT4N-AAC		AC AMMETER, 48x24mm, 12-24VAC/DC AUX	\$ 396.60
MT4N-AA-EN		AC AMMETER, 48x24mm, INPUT 50mA-5A,12/24VAC/DC AUX	\$ 337.10
MT4N-AV-E3		AC VOLTMETER,48x24mm, MULTIRANGE, 1x RELAY OUT + 4-20mA RETRANSMISSION	\$ 426.80
MT4N-AV-EN		AC VOLTMETER, 48x24mm, INPUT 2.5V- 250V,12-24VAC/DC AUX	\$ 337.10
MT4N-VAC		AC VOLTMETER, 48x24mm, 2.5V-250V,12-24VAC/DC AUX	\$ 396.60
MT4N-ADC		DC AMMETER, 48x24mm, 12-24VAC/DC AUX	\$ 351.60
MT4N-DA-EN		DC AMMETER, 48x24mm, INPUT 2mA-500mA,12-24VAC/DC AUX	\$ 292.20
MT4N-DV-EN		DC VOLTMETER 48x24mm, INPUT 50mV-50V,12-24VAC/DC AUX	\$ 292.20
MT4N-VDC		DC VOLTMETER, 48x24mm, 50mV-50V,12-24VAC/DC AUX	\$ 351.60
MT4N-MVDC		DC MILLIVOLTMETER, 48x24mm, 12-24VAC/DC AUX	\$ 351.60

### Autonics 4 – 20mA Loop Powered Digital Panel Meter M4YS

M4YS DIN W72 x H36 4-20mA loop powered panel meter The M4YS panel meter features programmable offset and pre-scale functions. It is powered from the 4-20mA loop current it monitors.

M4YS-NA		DIGITAL METER 72x36mm, LOOP POWERED 4-20mA INPUT	\$ 223.50
M4YS-NA-CALIB		DIGITAL METER 72x36mm, LOOP POWERED 4-20mA INPUT - CALIBRATED TO SPEC	\$ 282.90

## Digital Power Meters

### Accuenergy Digital Powermeters

Accuenergy powermeters provide high accuracy measurement, display and communication of all major electrical and power quality parameters including total harmonic distortion (THD) up to the 31st harmonic. The range includes both AC and DC system monitoring models, panel or DIN rail mountings, and features RS485 communications with easy-to-read LCD screens. ACUVIM-AL/EL are Class 0.5% accuracy, while ACUVIM-II offer Class 0.2%

#### ACUVIM 96x96mm powermeters for measurement and control of AC systems

ACUVIM-AL-D-5A-P1	POWERMETER, 96x96mm, 5A CT, 100-415VAC/100-300VDC AUX	\$ 755.00
ACUVIM-BL-D-1A-P2	POWERMETER, 96x96mm, 1A CT, 20-60VDC AUX ,PULSE OUT	\$ 925.90
ACUVIM-BL-D-60-1A-P1	POWERMETER, 96x96mm, 1A CT, 100-415VAC/100-300VDC AUX , PULSE OUT	\$ 840.50
ACUVIM-BL-D-60-5A-P1	POWERMETER, 96x96mm, 5A CT, 100-415VAC/100-300VDC AUX , PULSE OUT	\$ 840.50
ACUVIM-EL-333-P1	POWERMETER, 96x96mm, 333mV, 100-415VAC/100-300VDC AUX RS485	\$ 1,082.60
ACUVIM-EL-D-1A-P2	POWERMETER, 96x96mm, 1A CT, 20-60VDC AUX RS485	\$ 1,168.10
ACUVIM-EL-D-50-5A-P1	POWERMETER, 96x96mm, 5A CT, 100-415VAC/100-300VDC AUX RS485	\$ 1,082.60
ACUVIM-EL-D-50-5A-P2	POWERMETER, 96x96mm, 5A CT, 20-60VDC AUX RS485	\$ 1,168.10
ACUVIM-EL-D-5A-P1	POWERMETER, 96x96mm, 5A CT, 100-415VAC/100-300VDC AUX RS485	\$ 1,082.60
ACUVIM-IIBN-D-333-P1	POWERMETER, 96x96mm, 1A/5A CT, 100-415VAC/100-300VDC AUX, BACNET IP	\$ 1,277.80
ACUVIM-IIBN-D-5A-P1	POWERMETER, 96x96mm, 1A/5A CT, 100-415VAC/100-300VDC AUX, BACNET IP	\$ 1,277.80
ACUVIM-II-D-1A-P1	POWERMETER, 96x96mm, 1A/5A CT, 100-415VAC/100-300VDC AUX, BACNET IP	\$ 1,277.80
ACUVIM-II-D-1A-P2	POWERMETER, 96x96mm, 1A/5A CT, 100-415VAC/100-300VDC AUX, BACNET IP	\$ 1,277.80
ACUVIM-II-D-333-P1	POWERMETER, 96x96mm, 333mV, 100-415VAC/100-300VDC AUX RS485	\$ 1,410.30
ACUVIM-II-D-5A-P1	POWERMETER, 96x96mm, 1A/5A CT, 100-415VAC/100-300VDC AUX RS485	\$ 1,410.30
ACUVIM-II-D-5A-P2	POWERMETER, 96x96mm, 5A CT, 20-60VDC AUX RS485	\$ 1,552.70
ACUVIM-II-D-RCT-P1	POWERMETER, 96x96mm, RCT, 100-415VAC/100-300VDC AUX RS485	\$ 1,410.30
ACUVIM-II-E-5A-P1	POWERMETER 96x96mm, 5A CT, 100-415VAC/100-300VDC AUX, RS485, LOG +TOU	\$ 2,265.00
ACUVIM-II-M-333-P1	POWERMETER DIN MOUNT, 333mV CT, 100-415VAC/100-300VDC AUX,, NO DISPLAY	\$ 1,125.40
ACUVIM-II-M-5A-P2	POWERMETER DIN MOUNT, 5A CT, 20-60VDC AUX,, NO DISPLAY	\$ 1,267.80
ACUVIM-IIR-D-333-P1	POWERMETER, 96x96mm 333mV CT, 100-415VAC/100-300VDC AUX, RS485 + DATALOGGING	\$ 1,980.10
ACUVIM-IIR-D-5A-P1	POWERMETER, 96x96mm 1A/5A CT, 100-415VAC/100-300VDC AUX, RS485 + DATALOGGING	\$ 1,980.10
ACUVIM-IIR-D-5A-P2	POWERMETER, 96x96mm 1A/5A CT, 20-60VDC AUX, RS485 + DATALOGGING	\$ 2,122.50
ACUVIM-IIW-D-5A-P1	POWERMETER 96x96mm 1A/5A CT, STD AC/DC AUX, RS485+DATALOGGING+WAVEFORM	\$ 3,404.60
ACUVIM-IIW-D-5A-P2TE	POWERMETER 96x96mm TESLA SPECIFICATION, RS485+DATALOGGING+WAVEFORM	\$ 2,685.40
ACUVIM-IIW-D-RCT-P1	POWERMETER 96x96mm RCT CT, STD AC/DC AUX, RS485+DATALOGGING+WAVEFORM	\$ 3,404.60
ACUVIM-IIW-M-RCT-P1	POWERMETER DIN MOUNT RCT, STD AC/DC AUX, RS485+DATALOGGING+WAVEFORM	\$ 3,262.10
AXM-BIP	ACUVIM II MODULE - BACNET-IP	\$ 854.70
AXM-BMS	ACUVIM II MODULE - BACNET MS/TP	\$ 854.70
AXM-IO1	ACUVIM II MODULE - 6DI, 2RO, DI POWER SUPPLY	\$ 256.40
AXM-IO2-1A	ACUVIM II MODULE - 4DI, 2DO, 2AO	\$ 273.50
AXM-IO2-2A	ACUVIM II MODULE - 4DI, 2DO, 2AO	\$ 273.50
AXM-IO3-1A	ACUVIM II MODULE - 4DI, 2RO, 2AI	\$ 307.70
AXM-NET	ACUVIM II MODULE - NETWORK	\$ 397.80
AXM-NET-P	ACUVIM II MODULE - NET + PUSH	\$ 623.70
AXM-WEB2	ACUVIM II MODULE - DUAL PORT ETHERNET WITH WEB INTERFACE	\$ 837.60
AXM-WEB-PUSH	ACUVIM II MODULE - ETHERNET MODULE, WEB INTERFACE + MODBUS TCP/IP	\$ 666.70
ACUVIM-DL/EL-X1	DIGITAL MODULE X1 FOR ACUVIM EL 4DI+2DO	\$ 222.20
ACUVIM-II-DIN	DIN RAIL MOUNTING CLIP FOR ACUVIM II METER	\$ 51.30
ACU-REM-DS2	REMOTE DISPLAY FOR ACUVIM II TRANSDUCER	\$ 618.20
ACU-REM-DS2-6FT	CABLE (2M) FOR REM-DS2 REMOTE DISPLAY	\$ 57.00
ACU-RCT16-1000A-IP68	ROGOWSKI COIL, 1000A, 16 INCH, IP68	\$ 359.00
ACU-RCT24-2500A	ROGOWSKI COIL, 3000A, 24 INCH	\$ 446.70



#### EV/DV300 Series Multifunction Power and Energy Meters

Accuenergy 96mm2 digital powermeters provide robust metering capabilities with great value, measuring from 10v to 400Vac. Field-configurable 1A or 5A CT inputs and automatic frequency measurement add to EV300 series' versatility, and the highcontrast LCD display offers easy readability.

EV390-E0	POWERMETER 96x96mm, RS485 COMMS, 2x DIGITAL INPUT	\$ 461.50
EV390-E1	POWERMETER 96x96mm, RS485 COMMS, 6x DIGITAL INPUT, 2x RELAY O/P	\$ 552.70
EV390-E2	POWERMETER 96x96mm, RS485 COMMS, 6x DIGITAL INPUT, 2x PULSE O/P	\$ 564.10
EV390-E4	POWERMETER 96x96mm, RS485 COMMS, 6x DIGITAL INPUT, 2x RELAY & 2x ANALOGUE O/P	\$ 586.90



#### ACUDC 240 Series 72x72mm powermeters for measurement and control of DC systems, programmable shunt input (50-100mV)

ACUDC243-1000VA1P2X2	DC POWERMETER 1000V, SHUNT INPUT, 20-60VDC AUX, 2DI+2AO	\$ 1,626.80
ACUDC243-300VA1P1X0N	DC POWERMETER 300V, SHUNT INPUT, 240VAC/300VDC AUX, 2DI+2AO	\$ 769.20
ACUDC243-300VA1P2X1C	DC POWERMETER 300V, SHUNT INPUT, 20-60VDC AUX, 2xDI, 2xAO, RS485	\$ 1,387.50
ACUDC243-300VA1P2X2C	DC POWERMETER 300V, SHUNT INPUT, 20-60VDC AUX, 2DI+2AO, RS485	\$ 1,387.50
ACUDC243-300VA2P2CND	DC POWERMETER 300V, HALL EFFECT INPUT, 20-60VDC AUX, RS485	\$ 1,347.60
ACUDC243-600VA1P1X2C	DC POWERMETER 600V, SHUNT INPUT, 240VAC/300VDC AUX, 2DI+2AO, RS485	\$ 1,487.20
ACUDC243-600VA2P1X0C	DC POWERMETER 600V, HALL EFFECT INPUT, 240VAC/300VDC AUX, RS485	\$ 769.20
ACUDC243-60VA2P2X5C	DC POWERMETER 60V, HALL EFFECT INPUT, 2DI+15VDC, RS485	\$ 1,299.70



ACU-HAK21-200-A3-B



HALL EFFECT CT, 200A, BI-DIRECTIONAL 0-5VDC OUTPUT, +15VDC AUX SUPPLY  
Other ratios and sizes available on request

\$ 155.60

## Digital Power Meters

### AcuRev DIN rail mounted Power and Energy Meters

The AcuRev 1310 DIN Rail meter is engineered for high performance and easy integration into industrial or commercial facilities. Designed for cost-effective power and energy monitoring, it features a built-in LCD to simplify setup and provide quick access to metered data. Modbus-RTU and pulse output communications allow for seamless integration with data acquisition systems.

ACUREV1203-X1	POWERMETER, DIN RAIL, 1PH 80A DIRECT INPUT, MULTIFUNCTION, RS485 COMMS	\$ 398.90
ACUREV1302-X1	POWERMETER, DIN RAIL, 3PH 80A DIRECT INPUT, MULTIFUNCTION, RS485 COMMS	\$ 555.60
ACUREV1303-X1	POWERMETER, DIN RAIL, 3PH 80A DIRECT INPUT, MULTIFUNCTION, EVENT LOG, RS485 COMM	\$ 698.00
ACUREV1311-5A-X0	POWERMETER, DIN RAIL, 3PH 5A CT INPUT, BASE MODEL, AUX 100-415Vac/100-300Vdc	\$ 413.10
ACUREV1311-RCT-X0	POWERMETER, DIN RAIL, 3PH RCT INPUT, BASE MODEL, AUX 100-415Vac/100-300Vdc	\$ 413.10
ACUREV1312-333MV-X1	POWERMETER, DIN RAIL, 3PH, 333MV CT INPUT, RS485 COMMS, AUX 100-415Vac/100-300Vdc	\$ 612.50
ACUREV1312-5A-X0	POWERMETER, DIN RAIL, 3PH, 5A CT INPUT, RS485 COMMS, AUX 100-415Vac/100-300Vdc	\$ 555.60
ACUREV1312-5A-X1	POWERMETER, DIN RAIL, 3PH, 5A CT INPUT, RS485 COMMS + RELAY, AUX 100-415Vac/100-300Vdc	\$ 612.50
ACUREV1312-RCT-X0	POWERMETER, DIN RAIL, 3PH, RCT INPUT, RS485 COMMS, AUX 100-415Vac/100-300Vdc	\$ 555.60
ACUREV1313-333MV-X1	POWERMETER, DIN RAIL, 3PH, 333MV CT INPUT, BI-DIRECTIONAL, RS485 COMMS + RELAY	\$ 755.00
ACUREV1313-5A-X0	POWERMETER, DIN RAIL, 3PH, 5A CT INPUT, BI-DIRECTIONAL, RS485 COMMS	\$ 698.00
ACUREV1313-RCT-X1	POWERMETER, DIN RAIL, 3PH, RCT INPUT, BI-DIRECTIONAL, RS485 COMMS + RELAY	\$ 755.00
ACUREV1313-RCT-X0	POWERMETER, DIN RAIL, 3PH, RCT INPUT, BI-DIRECTIONAL, RS485 COMMS	\$ 698.00



### Acurev Multi-circuit digital Powermeters

The AcuRev 2100 Series is the next generation, multi-circuit submeter designed to measure multiple circuits using SnapOn CT technology for quick and easy installations in high-current applications. The AcuRev 2100 Series is the next generation, multi-circuit submeter designed to measure multiple circuits using SnapOn CT technology for quick and easy installations in high-current applications.

ACUREV2110-MV-485	18 CIRCUIT SUBMETER WITH 333mV SNAP ON CT INPUTS, SERIAL RS485	\$ 2,421.70
ACUREV2110-MV-WEB2	18 CIRCUIT SUBMETER WITH 333mV SNAP ON CT INPUTS, DUAL ETHERNET, WIFI, RS485	\$ 2,806.30



### Integra 12 Series Digital Meters

The Integra 12 series Digital Metering System is self-powered from any of the 3 phases and enables cost-effective digital metering systems for 1PH, 3P3W, and 3P4W configurations with programmable 100mA, 1A or 5A CT input. Quick-Connect RJ12 plug models pair with DL3N1 CTs. Built-in Modbus comms, 2 pulsed output relays. 96 x 96mm housing, programmable backlight display, IP54 front panel

INT-1221-S-01	POWERMETER 96x96mm, RJ12 DL CT'S 0.01A INPUT, RS485 + 2xPULSE OUTPUT	\$ 692.40
INT-1222-M-010	POWERMETER 96x96mm, 5A CT INPUT, SEPARATELY POWERED, RS485 OUTPUT	\$ 692.40
INT-1222-S-01	POWERMETER 96x96mm, 5A CT INPUT, SELF POWERED, RS485 + 2x PULSE OUTPUT	\$ 692.40
INT-1222-OPT-070	MODBUS TCP/IP MODULE FOR INTEGRA 1222 METER	\$ 704.60



### Integra Dual and Tri Load multi-circuit meters

The Integra DL 1 Dual Load and TL 1 Tri Load metering systems are designed as a cost-effective digital metering range for single-phase, three-phase/three wire, and three-phase/four wire configurations with programmable CT ratios, and plug-in modules for RS485 comms and/or pulsed output relays. DIN rail mounting

DL1-01	DUAL LOAD POWER METER 1PH OR 3PH. 100mA CT, MEASURES V,A,kW,kWh,HZ,PF	\$ 1,095.30
TL1-01	TRI-LOAD POWER METER 1PH OR 3PH. 100mA CT, MEASURES V,A,kW,kWh,HZ,PF	\$ 1,196.00



DL3N1-35-125/0.1	3 IN 1 CT 125/0.1A 35mm CENTRES 22x22mm BORE, RJ12 CONNECTOR	\$ 188.80
DL3N1-35-160/0.1	3 IN 1 CT 160/0.1A 35mm CENTRES 22x22mm BORE RJ12 CONNECTOR	\$ 188.80
DL3N1-35-250/0.1	3 IN 1 CT 250/0.1A 35mm CENTRES 22x22mm BORE RJ12 CONNECTOR	\$ 188.80
DL3N1-35-60/0.1	3 IN 1 CT 60/0.1A 35mm CENTRES 22x22mm BORE RJ12 CONNECTOR	\$ 188.80
DL3N1-45-250/0.1	3 IN 1 CT 250/0.1A 45mm CENTRES 27x32mm BORE RJ12 CONNECTOR	\$ 235.40
DL3N1-45-400/0.1	3 IN 1 CT 400/0.1A 45mm CENTRES 27x32mm BORE RJ12 CONNECTOR	\$ 235.40
DL3N1-45-600/0.1	3 IN 1 CT 600/0.1A 45mm CENTRES 27x32mm BORE RJ12 CONNECTOR	\$ 235.40
DL3N1-70-400/0.1	3 IN 1 CT 400/0.1A 70mm CENTRES 40x52mm BORE RJ12 CONNECTOR	\$ 308.40
DL3N1-70-600/0.1	3 IN 1 CT 600/0.1A 70mm CENTRES 40x52mm BORE RJ12 CONNECTOR	\$ 308.40
DL3N1-70-800/0.1	3 IN 1 CT 800/0.1A 70mm CENTRES 40x52mm BORE RJ12 CONNECTOR	\$ 308.40
DL3N1-CABLE-1.5-BL	CABLE BLUE WITH 2 x RJ12 CONNECTORS 1.5M	\$ 12.60
DL3N1-CABLE-1.5-GR	CABLE GREEN WITH 2 x RJ12 CONNECTORS 1.5M	\$ 12.60
DL3N1-CABLE-1.5-WH	CABLE WHITE WITH 2 x RJ12 CONNECTORS 1.5M	\$ 12.60
DL3N1-CABLE-3.0-BL	CABLE BLUE WITH 2 x RJ12 CONNECTORS 3M	\$ 27.20
DL3N1-CABLE-3.0-GR	CABLE GREEN WITH 2 x RJ12 CONNECTORS 3M	\$ 27.20
DL3N1-CABLE-3.0-WH	CABLE WHITE WITH 2 x RJ12 CONNECTORS 3M	\$ 27.20
DL3N1-CABLE-4.0-WH	CABLE WHITE WITH 2 x RJ12 CONNECTORS 4M	\$ 62.40
DL3N1-RJ12X2	RJ12 DOUBLE ADAPTER FOR SHORTING DL3N1 CTs	\$ 7.90



### RI3-01 Din Rail Mount meter

RI3-01	POWERMETER, DIN RAIL, 5A CT INPUT, RS485-RTU + PULSE OUTPUT	\$ 567.20
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### Northern Design DIN RAIL Digital Powermeters

RAIL350-400-1-230-RS	POWERMETER DIN RAIL, 1A CT INPUT, 230VAC AUX, RS485 OUTPUT	\$ 918.80
RAIL350-400-3-230-RS	POWERMETER DIN RAIL, 333mV CT, AUX. SUPPLY 230Vac, RS485 OUTPUT	\$ 818.70
RAIL350-400-5-230-RS	POWERMETER DIN RAIL, 5A CT, 230Vac AUX, RS485 OUTPUT	\$ 818.70
RAIL350-400-5-24D-RS	POWERMETER DIN RAIL, 5A CT, 24Vdc AUX, RS485 OUTPUT	\$ 1,103.60






## Digital Multimeters & Kilowatt-Hour Meters


### Panel Mounted Digital Multimeters

These state-of-the-art panel meters are designed for accurate measurement of the AC RMS voltage, AC RMS current, frequency, with user-selectable CT ratios from 5A to 5000A, accuracy class to 0.5, and easy to read displays

DM-0101-72		DIGITAL MULTIMETER 72x72mm, 1 PHASE, 170-275VAC, SINGLE LINE DISPLAY	\$ 244.60
DM-0301		DIGITAL MULTIMETER, 72x72mm, 1 PHASE, 170-275VAC, 3 LINE DISPLAY	\$ 244.60
DA-0303		DIGITAL AMMETER 72x72mm, 3 PHASE, 5A CT, 170-275VAC AUX	\$ 124.60
DKM-401		DIGITAL MULTIMETER, 96x96mm, 3 PHASE, AMPS-VOLTS-HZ, 5A CT, 400VAC	\$ 197.70
DKM-405		DIGITAL MULTIMETER, 96x96mm, 3 PHASE, AMPS-VOLTS-HZ, MDI, 5A CT, 400VAC,	\$ 215.00

### DDS-353-H2-M Single Phase Multifunction Powermeter Accuracy Class1 (EN50470-1/3)


Direct terminal connected DIN rail mount, blue backlit LCD display, measuring active and reactive energy, displays kWh, kvarh, V,A, kW, kVar, kVA, PF, with Modbus-RTU RS485 communications, single unit size (18mm wide), auto or manual scrolling of display. Also supports import/export kWh

DDS-353-H2-M		MULTIFUNCTION POWERMETER + kWhr METER, 1PH 100A DIRECT CONNECT, RS485 OUTPUT	\$ 327.30
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### Digital Power Meter communications

#### Wireless Transceivers and Data Acquisition

AcuMesh wireless RS485 transceivers are protocol independent, allowing the enabling of wireless communication by simple connection of any Master or Slave device at a serial baud rate range of 9600-230400. AcuMesh units are provided with whip aerial and power supply, and offer an indoor/ urban range of up to 300m and outdoor line-of-sight range up to 6.5km

ACUMESH-K		ACUMESH TRANCEIVER SURFACE MOUNT, 915-928MHz, WHIP ANTENNA, DESKTOP POWERSUPPLY	\$ 977.20
ACUMESH-L-900-ANZ		ACUMESH TRANCEIVER DIN RAIL, 915-928MHz, WHIP ANTENNA, DIN RAIL POWER SUPPLY	\$ 1,396.00

### Wireless Data Gateway

A data acquisition (DAQ) system serves as a central hub between interconnected devices designed to aggregate critical facility data such as power consumption or temperature

ACULINK810-900		DATA AQUISION GATEWAY WITH INTEGRATION, ACU-CLOUD, ACUMESH 900MHZ	\$ 3,846.20
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### Kilowatt-Hour Meters (Energy Meters)

LP-KWM 1 Ph and 3 Ph 3 or 4 Wire Balanced or Unbal Load Accuracy Class1 (IEC61036)

Single and three phase energy meters, with standard current transformer 1A and 5A inputs, selectable ratios to 4000/5A on the device. 7-digit LCD display of kWhrs and optional NPN or N/O relay contact output, M version has a galvanically isolated RS485 bus signal using MODBUS® RTU protocol. Input voltages 110V, 230Vac

#### Model LP-KWC kilowatt hour meters NPN open collector or relay output (specify)

LP1KW1C		ENERGY METER (KWHr), LCD DISPLAY, 1 PHASE, 5A CT	\$ 330.50
LP1KW3C		ENERGY METER (KWHr), LCD DISPLAY, 3Ph 3W BALANCED LOAD, 5A CT	\$ 363.60
LP1KW4C		ENERGY METER (KWHr), LCD DISPLAY, 3Ph 4W BALANCED LOAD, 5A CT	\$ 363.60
LP2KW3C		ENERGY METER (KWHr),LCD, 3 PHASE 3WIRE UNBALANCED LOAD, 5A CT	\$ 363.60
LP3KW4C			

#### Model LP-KWM kilowatt hour meters with MODBUS RTU output

LP1KW1M		ENERGY METER (KWHr), LCD DISPLAY, 1 PHASE, 5A CT, RS485 OUTPUT	\$ 396.60
LP1KW3M		ENERGY METER (KWHr), LCD DISPLAY, 3Ph 3W BALANCED LOAD, 5A CT, RS485 OUTPUT	\$ 396.60
LP1KW4M		ENERGY METER (KWHr), LCD DISPLAY, 3Ph 4W BALANCED LOAD, 5A CT, RS485 OUTPUT	\$ 396.60
LP2KW2M		ENERGY METER (KWHr), LCD, 2 PHASE 2 WIRE UNBALANCED LOAD, 5A CT, RS485 OUTPUT	\$ 672.90
LP2KW3M		ENERGY METER (KWHr), LCD, 3 PHASE 3WIRE UNBALANCED LOAD, 5A CT, RS485 OUTPUT	\$ 396.60
LP3KW4M		ENERGY METER (KWHr), LCD DISPLAY, 3Ph 4W UNBALANCED LOAD, 5A CT,RS485 OUTPUT	\$ 396.60

## Kilowatt-Hour Meters (Energy Meters)

LP-KWM 1 Ph and 3 Ph 3 or 4 Wire Balanced or Unbal Load Accuracy Class1 (IEC61036)

Single and three phase energy meters, with standard current transformer 1A and 5A inputs, selectable ratios to 4000/5A on the device. 7-digit LCD display of kW/hrs and optional NPN or N/O relay contact output, M version has a galvanically isolated RS485 bus signal using MODBUS® RTU protocol. Input voltages 110V, 230Vac

### Model LP-KWC kilowatt hour meters NPN open collector or relay output (specify)

LP1KW1C	ENERGY METER (KWHr), LCD DISPLAY, 1 PHASE, 5A CT	\$ 330.50
LP1KW3C	ENERGY METER (KWHr), LCD DISPLAY, 3Ph 3W BALANCED LOAD, 5A CT	\$ 363.60
LP1KW4C	ENERGY METER (KWHr), LCD DISPLAY, 3Ph 4W BALANCED LOAD, 5A CT	\$ 363.60
LP2KW3C	ENERGY METER (KWHr),LCD, 3 PHASE 3WIRE UNBALANCED LOAD, 5A CT	\$ 363.60
LP3KW4C	ENERGY METER (KWHr),LCD DISPLAY, 3Ph 4W UNBALANCED LOAD, 5A CT	\$ 363.60

### Model LP-KWM kilowatt hour meters with MODBUS RTU output

LP1KW1M	ENERGY METER (KWHr), LCD DISPLAY, 1 PHASE, 5A CT, RS485 OUTPUT	\$ 396.60
LP1KW3M	ENERGY METER (KWHr), LCD DISPLAY, 3Ph 3W BALANCED LOAD, 5A CT, RS485 OUTPUT	\$ 396.60
LP1KW4M	ENERGY METER (KWHr), LCD DISPLAY, 3Ph 4W BALANCED LOAD, 5A CT, RS485 OUTPUT	\$ 396.60
LP2KW2M	ENERGY METER (KWHr), LCD, 2 PHASE 2 WIRE UNBALANCED LOAD, 5A CT, RS485 OUTPUT	\$ 672.90
LP2KW3M	ENERGY METER (KWHr), LCD, 3 PHASE 3WIRE UNBALANCED LOAD, 5A CT, RS485 OUTPUT	\$ 396.60
LP3KW4M	ENERGY METER (KWHr), LCD DISPLAY, 3Ph 4W UNBALANCED LOAD, 5A CT,RS485 OUTPUT	\$ 396.60



### DDS-1Y Single Phase Direct Connect kilowatt hour meters Accuracy Class1 (IEC61036), pulse and Modbus output

Direct connected, DIN rail mount, LCD display, 40A and 100A are 1 module wide, 80A is 2 modules wide.

DDS-1Y-18L-40A	ENERGY METER (kWhr), LCD DISPLAY,1PH 40A DIRECT READ, PULSE OUTPUT	\$ 158.60
DDS-1Y-36L-80A-M	ENERGY METER (kWhr), LCD DISPLAY,1PH 80A DIRECT READ, RS485 MODBUS OUTPUT	\$ 185.10
DDS-353-H2-M	MULTIFUNCTION POWERMETER + KWHr METER, 1PH 100A DIRECT CONNECT, RS485 OUTPUT	\$ 327.30



### DTS-353 Three Phase 100A Direct Connect kilowatt hour Meters Accuracy Class1 (IEC61036, pulse and Modbus output

Direct connected DIN rail mount, LCD display, 4 modules wide,

DTS-353-100A-M	ENERGY METER (kWhr), 3PH 100A DIRECT READ RS485 MODBUS OUTPUT	\$ 363.60
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### Crompton Instruments Direct Connect kilowatt hour Meters Accuracy Class1B (kWh)

45A and 100A Direct connected, DIN rail mount, LCD display, 1 and 3-phase kWhr meters, import/export kWhr, with 2 pulsed outputs and MODBUS RTU protocol or single pulsed output

DRS-45-1P-MOD-01	ENERGY + POWER METER 45A DIRECT CONNECT IMP/EXP MODBUS + PULSE OUTPUT	\$ 190.60
DRS-100-1P-MOD-01	ENERGY+ POWER METER 100A 1 PH DIRECT CONNECT IMP/EXP MODBUS + 2 PULSE OUTPUTS	\$ 207.90
DRS-100-3P-MOD-01	ENERGY + POWER METER 100A 3PH DIRECT CONNECT IMP/EXPORT MODBUS	\$ 537.10



### Shelly Energy Metering

SHELLY-EM-120A	WI-FI ENERGY METER 120A & CONTACTOR CONTROL 110-230VAC	\$ 325.00
SHELLY-EM-50A	WI-FI ENERGY METER 50A & CONTACTOR CONTROL 110-230VAC	\$ 310.00
SHELLY-PLUS-1	WI-FI RELAY/SWITCH 1 CHANNEL16AMP 110-230VAC 12/24-240VDC	\$ 86.00
SHELLY-PLUS1PM	WI-FI RELAY/SWITCH WITH POWER METERING 1 CHANNEL16AMP 110-230VAC	\$ 97.00
SHELLY-PRO-3EM	SMART 3PH ENERGY METER LAN WI-FI D/RAIL MOUNT C/W CT'S	\$ 693.00
SHELLY-UNI	INTELLIGENT WI-FI OPERATED IMPLANT 12-24VAC/12-36VDC	\$ 73.30



### AcuRev DIN rail mounted Power and Energy Meters

The AcuRev 1310 DIN Rail meter is engineered for high performance and easy integration into industrial or commercial facilities. Designed for cost-effective power and

ACUREV1203-X1	POWERMETER, DIN RAIL, 1PH 80A DIRECT INPUT, MULTIFUNCTION, RS485 COMMS	\$ 398.90
ACUREV1302-X1	POWERMETER, DIN RAIL, 3PH 80A DIRECT INPUT, MULTIFUNCTION, RS485 COMMS	\$ 555.60
ACUREV1303-X1	POWERMETER, DIN RAIL, 3PH 80A DIRECT INPUT, MULTIFUNCTION, EVENT LOG, RS485 COMM	\$ 698.00
ACUREV1311-5A-X0	POWERMETER, DIN RAIL, 3PH 5A CT INPUT, BASE MODEL, AUX 100-415Vac/100-300Vdc	\$ 413.10
ACUREV1311-RCT-X0	POWERMETER, DIN RAIL, 3PH RCT INPUT, BASE MODEL, AUX 100-415Vac/100-300Vdc	\$ 413.10
ACUREV1312-333MV-X1	POWERMETER, DIN RAIL, 3PH, 333MV CT INPUT, RS485 COMMS, AUX 100-415Vac/100-300Vd	\$ 612.50
ACUREV1312-5A-X0	POWERMETER, DIN RAIL, 3PH, 5A CT INPUT, RS485 COMMS, AUX 100-415Vac/100-300Vdc	\$ 555.60
ACUREV1312-5A-X1	POWERMETER, DIN RAIL, 3PH, 5A CT INPUT, RS485 COMMS + RELAY, AUX 100-415Vac/100-	\$ 612.50
ACUREV1312-RCT-X0	POWERMETER, DIN RAIL, 3PH, RCT INPUT, RS485 COMMS, AUX 100-415Vac/100-300Vdc	\$ 555.60
ACUREV1313-333MV-X1	POWERMETER, DIN RAIL, 3PH, 333MV CT INPUT, BI-DIRECTIONAL, RS485 COMMS + RELAY	\$ 755.00
ACUREV1313-5A-X0	POWERMETER, DIN RAIL, 3PH, 5A CT INPUT, BI-DIRECTIONAL, RS485 COMMS	\$ 698.00
ACUREV1313-RCT-X1	POWERMETER, DIN RAIL, 3PH, RCT INPUT, BI-DIRECTIONAL, RS485 COMMS + RELAY	\$ 755.00
ACUREV1313-RCT-X0	POWERMETER, DIN RAIL, 3PH, RCT INPUT, BI-DIRECTIONAL, RS485 COMMS	\$ 698.00





# Current Transformers & Transducers

## Notes on Current Transformers

A current transformer is a transformer, which produces in its secondary winding a current, which is proportional to the current flowing in its primary winding. The secondary current is usually smaller in magnitude than the primary current.

The principal function of a CT is to produce a proportional current at a level of magnitude, which is suitable for the operation of measuring or protective devices such as indicating or recording instruments and relays.

The rated secondary current is commonly 5A or 1A, though lower currents such as 0.5A are not uncommon. It flows in the rated secondary load, usually called the burden, when the rated primary current flows in the primary winding.

The primary winding can consist merely of the primary current conductor passing once through an aperture in the current transformer core or it may consist of two or more turns wound on the core together with the secondary winding.

These are two basic CT types. The first is commonly called a "ring" type CT as the core is usually annular, but in some cases it may be square or rectangular in shape. The second is usually known as a "wound primary" type CT.

The primary and secondary currents are expressed as a ratio such as 100/5. With a 100/5 ratio CT, 100A flowing in the primary winding will result in 5A flowing in the secondary winding, provided the correct rated burden is connected to the secondary winding. Similarly, for lesser primary currents, the secondary currents are proportionately lower.

It should be noted that a 100/5 CT would not fulfil the function of a 20/1 or a 10/0.5 CT as the ratio expresses the current rating of the CT, not merely the ratio of the primary to the secondary currents.

The extent to which the secondary current magnitude differs from the calculated value expected by virtue of the CT ratio is defined by the [accuracy] "Class" of the CT. The greater the number used to define the class, the greater the permissible "current error" [the deviation in the secondary current from the calculated value].

Except for the least accurate classes, the accuracy class also defines the permissible phase angle displacement between primary and secondary currents. This latter point is important with measuring instruments influenced both by magnitude of current and by the phase angle difference between the supply voltage and the load current, such as kWh meters, wattmeter's, var meters and power factor meters.

Common burden ratings are 2.5, 5, 10, 15 and 30VA.

Current transformers are usually either "measuring" or "protective" types, these descriptions being indicative of their functions. The principal requirements of a measuring CT are that, for primary currents up to 120% or 125% of the rated current, its secondary current is proportional to its primary current to a degree of accuracy as defined by its "Class" and, in the case of the more accurate types, that a specified maximum phase angle displacement is not exceeded.

A desirable characteristic of a measuring CT is that it should "saturate" when the primary current exceeds the percentage of rated current specified as the upper limit to which the accuracy provisions apply. This means that at these higher levels of primary current the secondary current is less than proportionate.

The effect of this is to reduce the extent to which any measuring device connected to the CT secondary is subjected to current overload.

On the other hand the reverse is required of the protective type CT, the principal purpose of which is to provide a secondary current proportional to the primary current when it is several, or many, times the rated primary current. The measure of this characteristic is known as the "Accuracy Limit Factor" (A.L.F.). A protection type CT with an A.L.F. of 10 will produce a proportional current in the secondary winding [subject to the allowable current error] with primary currents up to a maximum of 10 times the rated current.

Preferred primary and secondary current ratings [and therefore ratios], classes, burdens and accuracy limit factors are defined in BS3938 and other comparable national standards, together with other minimum performance requirements, physical construction requirements, etc.

It should be remembered when using a CT that where there are two or more devices to be operated by the secondary winding, they must be connected in series across the winding. This is exactly the opposite of the method used to connect two or more loads to be supplied by a voltage or power transformer where the devices are paralleled across the secondary winding.

With a CT, an increase in the burden will result in an increase in the CT secondary output voltage. This is automatic and necessary to maintain the current to the correct magnitude. Conversely, a reduction in the burden will result in a reduction in the CT secondary output voltage.

This rise in secondary voltage output with an increase in burden means that, theoretically, with infinite burden as is the case with the secondary load open circuit, an infinitely high voltage appears across the secondary terminals. For practical reasons this voltage is not infinitely high, but can be high enough to cause a breakdown in the insulation between primary and secondary windings or between either or both windings and the core. For this reason, primary current should never be allowed to flow with no load or with a high resistance load connected across the secondary winding.

When considering the application of a CT it should be remembered that the total burden imposed on the secondary winding is not only the sum of the burden(s) of the individual device(s) connected to the winding but that it also includes the burden imposed by the connecting cable and the resistance of the connections.

If, for example, the resistance of the connecting cable and the connections is 0.1 ohm and the secondary rating of the CT is 5A, the burden of the cable and connections ( $R_{I2}$ ) is  $0.1 \times 5 \times 5 = 2.5\text{VA}$ . This must be added to the burden(s) of the connected device(s) when determining whether the CT has an adequately large burden rating to supply the required device(s) and the burden imposed by the connections.

Should the burden imposed on the CT secondary winding by the connected device(s) and the connections exceed the rated burden of the CT the CT may partly or fully saturate and therefore not have a secondary current adequately linear with the primary current.

The burden imposed by a given resistance in ohms [such as the resistance of a connecting cable] is proportional to the square



# Current Transformers & Transducers

## Notes on Current Transformers (continued)

of the rated secondary current. Therefore, where long runs of cable between CT and the connected device(s) are involved, the use of a 1A secondary CT and a 1A device rather than 5A will result in a 25-fold reduction in the burden of the connecting cables and connections.

All burden ratings and calculations are at rated secondary current.

Because of the foregoing, when a relatively long [more than a very few metres] cable run is required to connect a CT to its burden [such as a remote ammeter] a calculation should be made to determine the cable burden. This is proportional to the "round trip" resistance, i.e. twice the resistance of the length of twin cable used. Cable tables provide information on the resistance values of different sizes of conductors at 20°C per unit length. The calculated resistance is then multiplied by the square of the CT secondary current rating [25 for 5A, 1 for 1A]. If the VA burden as calculated by this method and added to the rated burden(s) of the device(s) to be driven by the CT exceeds the CT burden rating, the cable size must be increased [to reduce the resistance and thus the burden] or a CT with a higher VA burden rating must be used, or a lower CT secondary current rating [with matching change in the current rating of the device(s) to be driven] should be substituted.

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(with amendments made 13/4/88 and revised 4/10/95 and 09/04)

## Burden (VA) of copper wires between instrument and current transformer for 1A and 5A secondaries

Cross section mm <sup>2</sup>	Table for 1A Secondaries					
	Burden in VA (twin wires) Distance in metres					
	Distance					
	10m	20m	40m	60m	80m	100m
1.0	0.36	0.71	1.43	2.14	2.85	3.57
1.5	0.23	0.46	0.92	1.39	1.85	2.31
2.5	0.14	0.29	0.57	0.86	1.14	1.43
4.0	0.09	0.18	0.36	0.54	0.71	0.89
6.0	0.06	0.12	0.24	0.36	0.48	0.60

Cross section mm <sup>2</sup>	Table for 5A Secondaries					
	Burden in VA (twin wires) Distance in metres					
	Distance					
	1m	2m	4m	6m	8m	10m
1.5	0.58	1.15	2.31	3.46	4.62	5.77
2.5	0.36	0.71	1.43	2.14	2.86	3.57
4.0	0.22	0.45	0.89	1.34	1.79	2.24
6.0	0.15	0.30	0.60	0.89	1.19	1.49
10.0	0.09	0.18	0.36	0.54	0.71	0.89

## General

### CTs should be specified as follows:

RATIO: input / output current ratio  
 VA: total burden including pilot wires.  
 CLASS: accuracy required for operation  
 DIMENSIONS: maximum & minimum limits

### Metering CTs

In general, the following applies:

#### CLASS

- 0.1 or 0.2 for precision measurements
- 0.5 for high grade kilowatt hour meters for commercial grade kilowatt hour meters
- 3 for general industrial measurements
- 3 or 5 for approximate measurements

#### BURDEN (depending on pilot lead length)

- Moving iron ammeter 1-2VA
- Moving coil rectifier ammeter 1-2.5VA
- Electrodynamic instrument 2.5-5VA
- Maximum demand ammeter 3-6VA
- Recording ammeter or transducer 1-2.5VA

### Protection CTs

In addition to the general specification required for CT design, protection CT's require an Accuracy Limit Factor (ALF). This is the multiple of rated current up to which the CT will operate while complying with the accuracy class requirements.

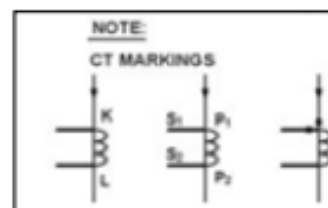
In general the following applies:

- Instantaneous overcurrent relays & trip coils - 2.5VA Class 10P5
- Thermal inverse time relays - 7.5VA Class 10P10
- Low consumption Relay - 2.5VA Class 10P10
- Inverse definite min. time relays (IDMT) overcurrent - 15VA Class 10P10/15
- IDMT Earth fault relays with approximate time grading - 15VA Class 10P10
- IDMT Earth fault relays with phase fault stability or accurate time grading required - 15VA Class 5P10

### Class X CTs

Class X CTs are special CTs used mainly in balanced protection systems (including restricted earth fault) where the system is sensitively dependent on CT accuracy. Further to the general CT specifications, the manufacturer needs to know:




- V<sub>k</sub>p - Voltage knee point
- I<sub>o</sub> - Maximum magnetising current at V<sub>k</sub>p
- R<sub>s</sub> - Maximum resistance of the secondary winding







## Current Transformers & Transducers

MBS AS Range CTs – DIN Rail, Foot or Bar Mount, Class 1

ASR22.3-40/5A		C.T. 40/5A, 22.5mm BORE, 1VA CL1	\$	96.70
ASR22.3-50/5A		C.T. 50/5A, 22.5mm BORE, 1VA CL3	\$	96.70
ASR22.3-60/5A		C.T. 60/5A, 22.5mm BORE, 1.5VA CL1	\$	96.70
ASR22.3-75/5A		C.T. 75/5A, 22.5mm BORE, 2.5VA CL1	\$	96.70
ASR22.3-100/5A		C.T. 100/5A, 22.5mm BORE, 2.5VA CL1	\$	96.70
ASK31.3-75/5A		C.T. 75/5A, 30x10mm BORE, 1.5VA CL1	\$	94.80
ASK31.3-100/5A		C.T. 100/5A, 30x10mm BORE, 2.5VA CL1	\$	94.80
ASK31.3-150/5A		C.T. 150/5A, 30x10mm BORE, 2.5VA CL1	\$	94.80
ASK31.3-200/5A		C.T. 200/5A, 30x10mm BORE, 5VA CL1	\$	94.80
ASK31.3-250/5A		C.T. 250/5A, 30x10mm BORE, 5VA CL1	\$	94.80
ASK31.3-300/5A		C.T. 300/5A, 30x10mm BORE, 5VA CL1	\$	94.80
ASK31.3-400/5A		C.T. 400/5A, 30x10mm BORE, 10VA CL1	\$	94.80
ASK31.3-500/5A		C.T. 500/5A, 30x10mm BORE, 10VA CL1	\$	94.80
ASK31.3-60/5A		C.T. 60/5A, 30x10mm BORE, 1VA CL1	\$	94.80
ASK31.3-600/5A		C.T. 600/5A, 30 x10mm BORE, 10VA CL1	\$	94.80
ASK41.4-50/5A		C.T. 50/5A, 40x10mm BORE, 1.5VA CL1	\$	245.50
ASK41.4-60/5A		C.T. 60/5A, 40x10mm BORE, 1.5VA CL1	\$	77.40
ASK41.4-100/5A		C.T. 100/5A, 40x10mm BORE, 3.75VA CL1	\$	77.40
ASK41.4-150/5A		C.T. 150/5A, 40x10mm BORE, 5VA CL1 (900.400.0098)	\$	77.40
ASK41.4-200/5A		C.T. 200/5A, 40x10mm BORE, 10VA CL1	\$	77.40
ASK41.4-250/5A		C.T. 250/5A, 40x10mm BORE, 10VA CL1	\$	77.40
ASK41.4-300/5A		C.T. 300/5A, 40x10mm BORE, 15VA CL1	\$	77.40
ASK41.4-400/5A		C.T. 400/5A, 40x10mm BORE, 10VA CL1 (900.400.005)	\$	77.40
ASK41.4-500/5A		C.T. 500/5A, 40x10mm BORE, 15VA CL1	\$	77.40
ASK41.4-600/5A		C.T. 600/5A, 40x10mm BORE, 15VA CL1	\$	77.40
ASK41.4-750/5A		C.T. 750/5A, 40x10mm BORE, 10VA CL1	\$	77.40
ASK41.4-800/5A		C.T. 800/5A, 40x10mm BORE, 15VA CL1	\$	77.40
ASK41.4-1000/5A		C.T. 1000/5A, 40x10mm BORE, 10VA CL1	\$	77.40
ASK51.4-300/5A	C.T. 300/5A, 44mm DIA BORE, 10VA CL1	\$	115.10	
ASK81.4-400/5A		C.T. 400/5A, 80x10x60mm BORE, 5VA CL1	\$	194.40
ASK81.4-500/5A		C.T. 500/5A, 80x10x60mm BORE 10VA CL1	\$	194.40
ASK81.4-600/5A		C.T. 600/5A, 80x10x60mm BORE, 10VA CL1	\$	194.40
ASK81.4-800/5A		C.T. 800/5A, 80x10x60mm BORE, 15VA CL1 (900.400.007)	\$	194.40
ASK81.4-1000/5A		C.T. 1000/5A, 80x10x60mm BORE, 30VA CL1	\$	194.40
ASK81.4-1200/5A		C.T. 1200/5A, 80x10x60mm BORE, 15VA CL1	\$	194.40
ASK81.4-1600/5A		C.T. 1600/5A, 80x10x60mm BORE, 30VA CL1	\$	194.40
ASK81.4-2000/5A		C.T. 2000/5A, 80x10x60mm BORE, 30VA CL1	\$	194.40
ASK83.4-1250/5A		C.T. 1250/5A, 84x34mm BORE, 10VA CL1	\$	270.00
ASK83.4-1000/5A-DT		C.T. 1000/5A, 84x34mm BORE, 15VA CL1, DUAL TERMINAL	\$	272.80
ASK83.4-1600/5A-DT	C.T. 1600/5A, 84x34mm BORE, 15VA CL1 DUAL TERMINAL	\$	272.80	
ASK103.3-800/5A		C.T. 800/5A, 103x30mm BORE, 15VA CL1	\$	232.10
ASK103.3-1600/5A		C.T. 1600/5A, 103x30mm BORE, 30VA CL1	\$	232.10
ASK123.3-1000/5A		C.T. 1000/5A, 123x30mm BORE, 10VA CL1	\$	252.50
ASK123.3-1200/5A		C.T. 1200/5A, 123x30mm BORE, 10VA CL1	\$	252.50
ASK123.3-1600/5A		C.T. 1600/5A, 123x30mm BORE, 10VA CL1	\$	252.50
ASK123.3-2000/5A		C.T. 2000/5A, 123x30mm BORE, 15VA CL1 (900.400.0088)	\$	252.50
ASK123.3-2500/5A		C.T. 2500/5A, 123x30mm BORE, 30VA CL1	\$	252.50
ASK123.3-3000/5A		C.T. 3000/5A, 123x30mm BORE, 30VA CL1	\$	252.50
ASK123.3-3000/5A-400		C.T. 3000/5A, 123x30mm BORE, 30VA CL1 400HZ	\$	306.70




## Current Transformers & Transducers

Rishabh XMER Economy Range CTs – DIN Rail, Foot or Bar Mount, Class 0.5, 1 and 3

XMER-62-30-60-5A		CT 60/5A , 62x30mm BORE, 1.5VA CL1, 2VA CL3	\$	67.50
XMER-62-30-100-5A		CT 100/5A , 62x30mm BORE, 2.50VA CL1	\$	67.50
XMER-62-30-150-5A		CT 150/5A , 62x30mm BORE, 3.75VA CL0.5, 5VA CL1, 7.5VA CL3	\$	67.50
XMER-62-40-200-5A		CT 200/5A , 62x30mm BORE, 3.75VA CL1&3	\$	67.50
XMER-62-40-300-5A		CT 300/5A , 62x30mm BORE, 5VA CL1	\$	67.50
XMER-62-40-400-5A		CT 400/5A , 62x30mm BORE, 5VA CL1	\$	67.50
XMER-74-50-500-5A		CT 500/5A , 74x50mm BORE, 10VA CL1	\$	86.00
XMER-86-50-400-5A		CT 400/5A , 86x50mm BORE, 2.5VA CL1	\$	91.30
XMER-86-50-600-5A		CT 600/5A , 86x50mm BORE, 15VA CL0.5, 20VA CL1&3	\$	91.30
XMER-86-50-800-5A		CT 800/5A , 86x50mm BORE, 30VA C1	\$	91.30
XMER-104-80-1000-5A		CT 1000/5A, 104x80mm BORE, 20VA, CL0.5/1/3	\$	108.40
XMER-104-80-1200-5A		CT 1200/5A, 104x80mm BORE, 20VA. CL1	\$	108.40
XMER-104-80-1500-5A		CT 1500/5A, 104x80mm BORE, 30VA. CL1	\$	108.40
XMER-104-80-1600-5A		CT 1600/5A, 104x80mm BORE, 20VA. CL0.5, 30VA CL1 & 3	\$	108.40
XMER-140-80-1600-5A		CT 600/5A, 140x80mm BORE, 60VA. CL1	\$	182.40
XMER-140-80-800-5A		CT 800/5A, 140x80mm BORE, 45VA. CL1	\$	182.40
XMER-140-100H-2500-5		CT 2500/5A, 140x100mm BORE, 45VA. CL1	\$	182.40
XMER-140-100H-3000/5		CT 3000/5A, 140x100mm BORE, 60VA. CL1	\$	182.40
XMER-140-100V-1000-5		CT 1000/5A, 140x100mm BORE, 15VA. CL0.5, 20VA CL1&3	\$	182.40
XMER-140-100V-1200-5		CT 1200/5A, 140x100mm BORE, 30VA. CL1	\$	182.40
XMER-140-100V-1600-5		CT 1600/5A, 140x100mm BORE, 45VA. CL1	\$	182.40
XMER-140-100V-2000-5		CT 2000/5A, 140x100mm BORE, 45VA. CL1	\$	182.40
XMER-140-100V-2500-5	CT 2500/5A, 140x100mm BORE, 45VA. CL1	\$	182.40	
XMER-140-100V-3000/5	CT 3000/5A, 140x100mm BORE, 60VA. CL1	\$	182.40	
XMER-225-167-5000-5A		CT 5000/5A, 225x167mm BORE, 100VA. CL1	\$	323.90
XMER-MTG-KIT		XMER CT MOUNTING FEET AND BUS-BAR SCREWS 140-100 SIZE	\$	5.30


### Crompton 3-in-1 Current Transformers

M series 3-in-1 Current Transformers combine three traditional CTs in one moulded case, giving 5A outputs to a variety of instruments and/or processes. 3-in-1 CTs can be directly installed next to a three-phase moulded case circuit breaker, saving installation time

M3N1-25-100/5A		CT, 3 IN 1, 100/5A, 15x25mm BORE, 25mm CENTRES	\$	157.40
M3N1-25-125/5A		CT, 3 IN 1, 125/5A, 15x25mm BORE, 25mm CENTRES	\$	157.40
M3N1-25-150/5A		CT, 3 IN 1, 150/5A, 15x25mm BORE, 25mm CENTRES	\$	157.40
M3N1-25-160/5A		CT, 3 IN 1, 160/5A, 15x25mm BORE, 25mm CENTRES	\$	157.40
M3N1-25-60/5A		CT, 3 IN 1, 60/5A, 15x25mm BORE, 25mm CENTRES	\$	157.40
M3N1-25-DINCLIP		DIN RAIL MOUNTING CLIP FOR M3N1 25 SERIES	\$	8.70
M3N1-35-100/5A		CT, 3 IN 1, 100/5A, 21x25mm BORE, 35mm CENTRES	\$	157.40
M3N1-35-125/5A		CT, 3 IN 1, 125/5A, 21x25mm BORE, 35mm CENTRES	\$	157.40
M3N1-35-150/5A		CT, 3 IN 1, 150/5A, 21x25mm BORE, 35mm CENTRES	\$	157.40
M3N1-35-160/5A		CT, 3 IN 1, 160/5A, 21x25mm BORE, 35mm CENTRES	\$	157.40
M3N1-35-200/5A		CT, 3 IN 1, 200/5A, 21x25mm BORE, 35mm CENTRES	\$	157.40
M3N1-35-250/5A		CT, 3 IN 1, 250/5A, 21x25mm BORE, 35mm CENTRES	\$	157.40
M3N1-35-DINCLIP	DIN RAIL MOUNTING CLIP FOR M3N1 35 SERIES	\$	8.70	
M3N1-45-250/5A		CT, 3 IN 1, 250/5A, 31x31mm BORE, 45mm CENTRES	\$	197.00
M3N1-45-300/5A		CT, 3 IN 1, 300/5A, 31x31mm BORE, 45mm CENTRES	\$	197.00
M3N1-45-400/5A		CT, 3 IN 1, 400/5A, 31x31mm BORE, 45mm CENTRES	\$	197.00
M3N1-45-500/5A		CT, 3 IN 1, 500/5A, 31x31mm BORE, 45mm CENTRES	\$	197.00
M3N1-45-630/5A		CT, 3 IN 1, 630/5A, 31x31mm BORE, 45mm CENTRES	\$	197.00
M3N1-45-DINCLIP		DIN RAIL MOUNTING CLIP FOR M3N1 45 SERIES	\$	8.70

### Crompton Summation CTs

Summation CTs are designed to summarise the outputs of 2 or more current transformers of equal ratio i.e., 5A secondary outputs

S95-P94		SUMMATION CT, 2 WAY, 5+5A=5A, 5VA CL1	\$	337.50
S95-P94-5+5+5		SUMMATION CT, 3 WAY, 5+5+5=5A, 5VA CL1	\$	337.50
S97-P-5+5+5+5=5		SUMMATION CT, 4 WAY, 5+5+5+5=5, 5VA CL1	\$	387.90
S97P-94F-5+5+5+5+5=5		SUMMATION CT, 5 WAY, 5+5+5+5+5=5A, 5VA CL1	\$	388.70

## Current Transformers - SPLIT-CORE

### MBS KBR Series Split-Core Current Transformers

A range of compact split core current transformers with 5A output, the KBR range features "click-together" construction, allowing one-handed fitting. KBR 32 models are 101mm(h) x 60mm(w) with a 32.5mm dia bore; KBR 44 models are 120.6mm(h) x 72mm(w) with a 44mm dia bore. Supplied with 500mm cable

KBR18L-150/5A	CT SPLIT-CORE, 19mm BORE, 150/5A, 1VA CL1	\$	194.30
KBR18L-250/5A	CT SPLIT-CORE, 19mm BORE, 250/5A, 2VA CL1	\$	194.30
KBR32-100/5A	CT SPLIT-CORE, 32mm BORE, 100/5A, 1.5VA CL3	\$	359.80
KBR32-150/5A	CT SPLIT-CORE, 32mm BORE, 150/5A, 3VA CL3	\$	359.80
KBR32-200/5A	CT SPLIT-CORE, 32mm BORE, 200/5A, 3VA CL3	\$	359.80
KBR32-250/5A	CT SPLIT-CORE, 32mm BORE, 250/5A, 3VA CL3	\$	358.50
KBR32-300/5A	CT SPLIT-CORE, 32mm BORE, 300/5A, 2.5VA CL1	\$	359.80
KBR32-400/5A	CT SPLIT-CORE, 32mm BORE, 400/5A, 5VA CL1	\$	359.80
KBR32-500/5A	CT SPLIT-CORE, 32mm BORE, 500/5A, 5VA CL1	\$	359.80
KBR32-600/5A	CT SPLIT-CORE, 32mm BORE, 600/5A, 5VA CL1	\$	359.80
KBR42L-600-5/A	CT SPLIT-CORE, 40x85mm BORE, 600/5A, 5VA, CL1	\$	414.20
	CT SPLIT-CORE, 40x85mm BORE, 800/5A, 5VA, CL1	\$	414.20
KBR44-1000/5A	CT SPLIT-CORE, 44mm BORE, 1000/5A, 5VA CL1	\$	419.50
	CT SPLIT-CORE, 44mm BORE, 250/5A, 1.5VA CL1	\$	419.50
KBR44-250/5A	CT SPLIT-CORE, 44mm BORE, 250/5A, 1.5VA CL1	\$	419.50
KBR44-300/1A	CT SPLIT-CORE, 44mm BORE, 300/1A, 2.5VA CL1	\$	293.00
KBR44-300/5A	CT SPLIT-CORE, 44mm BORE, 300/5A, 2.5VA CL1	\$	419.50
KBR44-400/5A	CT SPLIT-CORE, 44mm BORE, 400/5A, 5VA CL1	\$	419.50
KBR44-500/5A	CT SPLIT-CORE, 44mm BORE, 500/5A, 5VA CL1	\$	419.50
KBR44-600/5A	CT SPLIT-CORE, 44mm BORE, 600/5A, 5VA CL1	\$	419.50
KBR44-750/5A	CT SPLIT-CORE, 44mm BORE, 750/5A, 5VA CL1	\$	419.50
KBR44-800/5A	CT SPLIT-CORE, 44mm BORE, 800/5A, 5VA CL1	\$	419.50
KBR42L-600-5/A	CT SPLIT-CORE, 40x85mm BORE, 600/5A, 5VA, CL1	\$	414.20
	CT SPLIT-CORE, 40x85mm BORE, 800/5A, 5VA, CL1	\$	414.20



### MBS KBU Series Split-Core Current Transformers

A range of split core current transformers with 5A secondaries, primary current ranges from 100A to 5000A

KBU23-100/5A	CT SPLIT-CORE, 20x30mm BORE, 100/5A, 1.25VA CL3	\$	394.90
KBU23-150/5A	CT SPLIT-CORE, 20x30mm BORE, 150/5A, 1.5VA CL3	\$	394.90
KBU23-200/5A	CT SPLIT-CORE, 20x30mm BORE, 200/5A, 2.5VA CL3	\$	394.90
KBU23-250/5A	CT SPLIT-CORE, 20x30mm BORE, 250/5A, 1.5VA CL1	\$	296.10
KBU23-300/5A	CT SPLIT-CORE, 20x30mm BORE, 300/5A, 3.75VA CL1	\$	296.10
KBU23-400/5A	CT SPLIT-CORE, 20x30mm BORE, 400/5A, 5VA CL1	\$	394.90
KBU58-250/5A	CT SPLIT-CORE, 50x80mm BORE, 250/5A, 1.5VA CL1	\$	459.10
	CT SPLIT-CORE, 50x80mm BORE, 300/5A, 2.5VA CL1	\$	459.10
KBU58-300/5A	CT SPLIT-CORE, 50x80mm BORE, 300/5A, 2.5VA CL1	\$	459.10
KBU58-400/5A	CT SPLIT-CORE, 50x80mm BORE, 400/5A, 2.5VA CL1	\$	459.10
KBU58-500/5A	CT SPLIT-CORE, 50x80mm BORE, 500/5A, 5VA CL1	\$	459.10
KBU58-600/5A	CT SPLIT-CORE, 50x80mm BORE, 600/5A, 5VA CL1	\$	459.10
KBU58-800/5A	CT SPLIT-CORE, 50x80mm BORE, 800/5A, 7.5VA CL1	\$	459.10
KBU58-1000/5A	CT SPLIT-CORE, 50x80mm BORE, 1000/5A, 10VA CL1	\$	459.10
KBU812-1000/5A	CT SPLIT-CORE, 80x120mm BORE, 1000/5A, 10VA CL1	\$	544.20
KBU812-250/5A	CT SPLIT-CORE, 80x120mm BORE, 250/5A, 1.5VA CL1	\$	544.20
	CT SPLIT-CORE, 80x120mm BORE, 300/5A, 2.5VA CL1	\$	544.20
KBU812-300/5A	CT SPLIT-CORE, 80x120mm BORE, 300/5A, 2.5VA CL1	\$	544.20
KBU812-500/5A	CT SPLIT-CORE, 80x120mm BORE, 500/5A, 5VA CL1	\$	544.20
KBU812-1200/5A	CT SPLIT-CORE, 80x120mm BORE, 1200/5A, 10VA CL1	\$	544.20
KBU812-1500/5A	CT SPLIT-CORE, 80x120mm BORE, 1500/5A, 15VA CL1	\$	544.20
KBU816-1600/5A	CT SPLIT-CORE, 80x160mm BORE, 1600/5A, 15VA CL1	\$	527.50
	CT SPLIT-CORE, 80x160mm BORE, 2000/5A, 15VA CL1	\$	527.50
KBU816-2000/5A	CT SPLIT-CORE, 80x160mm BORE, 2000/5A, 15VA CL1	\$	527.50
KBU816-2500/5A	CT SPLIT-CORE, 80x160mm BORE, 2500/5A, 15VA CL1	\$	641.30
KBU816-3000/5A	CT SPLIT-CORE, 80x160mm BORE, 3000/5A, 30VA CL1	\$	641.30
KBU816-4000/5A	CT SPLIT-CORE, 80x160mm BORE, 4000/5A, 30VA CL1	\$	641.30
KBU816-5000/5A	CT SPLIT-CORE, 80x160mm BORE, 5000/5A, 30VA CL1	\$	641.30
KBU-MOUNTING-KIT	CT SPLIT-CORE, 80x160mm BORE, 5000/5A, 30VA CL1	\$	641.30



## Split-Core CT'S ,Transducers & Current Switches

### ACCUENERGY 333mV Split-Core Current Transformers

A range of compact split core current transformers with high accuracy 333mV output, the ACCUENERGY Split-Core range features “click-together” construction, allowing one-handed fitting. Accuracy is 1%, frequency 50/60Hz. AcuCT-075 models are 51 x 53 x 17mm; AcuCT-125 models are 83 x 85 x 26mm; AcuCT-200 models are 121 x 127 x 30mm; AcuCT-H040 models are 42 x 29 x 27mm and come with a 1M cable

ACUCT-H040-20:333	HINGED CT 20A:333mV 10mm BORE	\$	62.70
ACUCT-H040-30:333	HINGED CT 30A:333mV 10mm BORE	\$	62.70
ACUCT-H040-60:333	HINGED CT 60A:333mV 10mm BORE	\$	62.70
ACUCT-H063-100:333	HINGED CT 100A:333mV 16mm BORE	\$	85.50
ACUCT-H100-200:333	HINGED CT 200A:333mV 25mm BORE	\$	111.10
ACUCT-H100-250:333	HINGED CT 250A:333mV 25mm BORE	\$	111.10
ACUCT-075-50:333	SPLIT-CORE CT 50A:333mV 19mm BORE	\$	96.90
ACUCT-075-100:333	SPLIT-CORE CT 100A:333mV 19mm BORE	\$	96.90
ACUCT-075-200-333	SPLIT-CORE CT 200A:333mV 19mm BORE	\$	96.90
ACUCT0812-200-5A	SPLIT-CORE CT, 200:5A, 21 x 31mm BORE	\$	152.70
ACUCT0812-250-5A	SPLIT-CORE CT, 250:5A, 21 x 31mm BORE	\$	152.70
ACUCT0812-300-5A	SPLIT-CORE CT, 300:5A, 21 x 31mm BORE	\$	152.70
ACUCT-125-250:333	SPLIT-CORE CT 250A:333mV 32mm BORE	\$	133.90
ACUCT-125-400:333	SPLIT-CORE CT 400A:333mV 32mm BORE	\$	133.90
ACUCT-200-1200:333	SPLIT-CORE CT 1200A:333mV 51mm BORE	\$	162.40
ACUCT-200-400:333	SPLIT-CORE CT 400A:333mV 51mm BORE	\$	162.40
ACUCT-200-600:333	SPLIT-CORE CT 600A:333mV 51mm BORE	\$	162.40
ACUCT3050-3000A:333M	SPLIT-CORE CT, 3000A:333mV,127x190.5mm BORE	\$	213.70
ACUCT4161R-1600A:333	SPLIT-CORE CT, 1600A:333mV, 104x155mm BORE	\$	683.80
ACUCT4161R-2000A:333	SPLIT-CORE CT, 2000A:333mV, 104x155mm BORE	\$	683.80



### ACCUENERGY Rogowski Coil Flexible CTs

A rope-style CT providing a versatile solution when space is limited, the Rogowski Coil is a high specification flexible current transformers that measure AC

ACU-RCT16-1000A-IP68	ROGOWSKI COIL,1000A,16 IINCH, IP68	\$	359.00
ACU-RCT24-2500A	ROGOWSKI COIL, 3000A, 24 IINCH	\$	446.70
ACU-RIK16-5A	RIK INTEGRATOR + 3 x 16inch ROGOWSKI COILS 2.5A TO 60000A WITH 2m LEADS	\$	2,991.50
ACU-RIK24-5A	RIK INTEGRATOR + 3 x 24inch ROGOWSKI COILS 2.5A TO 60000A WITH 2m LEADS	\$	3,254.70
ACU-RIK36-5A	RIK INTEGRATOR + 3 x 36inch ROGOWSKI COILS 2.5A TO 60000A WITH 2m LEADS	\$	3,853.00
ACU-RIK-MA-3	RIK INTEGRATOR KIT, 3-CH + PSU ONLY	\$	1,514.80



## R-ISW Current Switches

R-ISW-16A	CURRENT SWITCH, 16A CIRCUIT, TRIP 200mA, 5MIN DELAY, RELAY 10A@250V CO	\$ 158.60
R-ISW-16A-10M	CURRENT SWITCH, 16A CIRCUIT, TRIP 200mA,10MIN DELAY, RELAY 10A@250V CO	\$ 158.60
R-ISW-16A-15M	CURRENT SWITCH, 16A CIRCUIT, TRIP 200mA,15MIN DELAY, RELAY 10A@250V CO	\$ 158.60
R-ISW-16A-ANL	CURRENT SWITCH, 16A CIRCUIT, TRIP 200mA, 5MIN DELAY, RELAY 10A@250V CO	\$ 158.60
R-ISW-16A-ANL-1A	CURRENT SWITCH, 16A CIRCUIT, TRIP 1A, 5MIN DELAY 50-200mA, RELAY 10A@250V CO	\$ 158.60
R-ISW-16A-ANL-ND	CURRENT SWITCH, 16A CIRCUIT, TRIP 200mA, NO DELAY, RELAY 10A@250V CO	\$ 158.60
R-ISW-30A	CURRENT SWITCH, 30A CIRCUIT, TRIP 200mA, 5MIN DELAY, RELAY 10A@250V CO	\$ 169.20
R-ISW-30A-7A-NODELAY	CURRENT SWITCH, 30A CIRCUIT, TRIP 7A, NO DELAY, RELAY 10A@250V CO	\$ 193.90
R-ISW-30A-ANL	CURRENT SWITCH, 30A CIRCUIT, TRIP 200mA, 5MIN DELAY, RELAY 10A@250V CO	\$ 169.20
R-ISW-30A-DGE	CURRENT SWITCH, 30A CIRCUIT, TRIP 7A,10MIN DELAY, RELAY 10A@250V CO	\$ 193.90
R-ISW-30A-SPECIAL	CURRENT SWITCH, 30A CIRCUIT, CUSTOM TRIP + DELAY, RELAY 10A@250V CO	\$ 193.90
R-ISW-A-16A	CURRENT SWITCH, 16A CIRCUIT, ADJ TRIP + DELAY 50-200mA, RELAY 10A@250V CO	\$ 174.50
R-ISW-A-30A	CURRENT SWITCH, 30A CIRCUIT, ADJ TRIP + DELAY 50-200mA, RELAY 10A@250V CO	\$ 185.10
R-ISW-A-30A-SPECIAL	CURRENT SWITCH, 30A CIRCUIT, CUSTOM TRIP AND DELAY, RELAY 10A@250V CO	\$ 193.90
R-ISW-FLUSH	CURRENT SWITCH, THRU-HOLE, 6A CIRCUIT, TRIP 0.2A, RELAY 6A@250VAC NO	\$ 145.50
R-ISW-L-16A	CURRENT SWITCH, 16A CIRCUIT, TRIP 200mA, DELAY 5MIN, RELAY 8A@24V GOLD	\$ 158.60
R-ISW-L-30A	CURRENT SWITCH, 30A CIRCUIT, TRIP 200mA, DELAY 5MIN, RELAY 8A@24V GOLD	\$ 169.20
R-ISW-LA-16A	CURRENT SWITCH, 16A CIRCUIT, ADJ TRIP + DELAY 50-200mA, RELAY 8A@24V GOLD	\$ 174.50
R-ISW-LA-30A	CURRENT SWITCH, 30A CIRCUIT, ADJ TRIP + DELAY 50-200mA, RELAY 8A@24V GOLD	\$ 185.10



## CR Magnetics Current Switches

Self-powered, thru-bore fixed set-point (350mA) current switch for ON/OFF indication of current flow		
CR9321-ACA	CURRENT SWITCH, 350MA SETPOINT, SCR OUTPUT 0.8A, 6.8MM BORE	\$ 102.10
CR9321-NPN	CURRENT SWITCH, 350MA SETPOINT, NPN OUTPUT 120MA, 6.8MM BORE	\$ 102.10
CR9321-PPN	CURRENT SWITCH, 350MA SETPOINT, PNP OUTPUT 120MA, 6.8MM BORE	\$ 102.10
CR9350-ACA	CURRENT SWITCH, 350MA SETPOINT, SCR OUTPUT 0.8A, 15.5MM BORE	\$ 162.90
CR9350-PPN	CURRENT SWITCH, 350MA SETPOINT, PNP OUTPUT 120MA, 15.5MM BORE	\$ 162.90







## Switchboard - cabinet, Ventilation and Test Terminals

### Pfannenberg Cabinet Fans

PF11.000-109		FILTER FAN 109x109mm 25M3/HR 230V IP54 (11611101055)	\$ 206.00
PF22.000-145		FILTER FAN 145x145mm 61M3/HR 230VAC IP54 (11622101055)	\$ 184.20
PF22.000-145-115		FILTER FAN 145x145mm 61M3/HR 115VAC IP54 (1162251055)	\$ 258.70
PF22.000-145-24VDC		FILTER FAN 145x145mm 61M3/HR 24VDC IP54 (11622801055)	\$ 305.80
PF22.000-145-24VDC-B		FILTER FAN 145x145mm 61M3/HR 24VDC IP54-BLACK (11622801050)	\$ 368.60
PF32.000-200		FILTER FAN 202x202mm 110M3/HR 230VAC IP54 (11632101055)	\$ 232.70
PF32.000-200-115VAC		FILTER FAN 202x202mm 110M3/HR 115VAC IP54 (11632151055)	\$ 280.10
PF32.000-24VDC		FILTER FAN 202x202mm 110M3/HR 24VDC IP54 EMC (11832801055)	\$ 490.70
PF42.500-24VDC		FILTER FAN 252x252mm 156M3/HR 24VDC IP54 (11642801055)	\$ 609.50
PF43.000-250		FILTER FAN 252x252mm 256M3/HR 230VAC IP54 (11643101055)	\$ 459.80
PF43.000-250-24VDC		FILTER FAN 252x252mm 256m3/HR 24VDC (11643801055)	\$ 865.40
PF66.000-320		FILTER FAN 320x320mm 640M3/HR 230VAC IP54 (11666102055)	\$ 783.90
PF66.000-320-110		FILTER FAN 320x320mm 640M3/HR 110VAC IP54 (11666152055)	\$ 1,115.70
PF66.000-320-IP55		FILTER FAN 320x320mm 770M3/HR 230VAC IP55 (11666103055)	\$ 870.40
PF67.000-320	FILTER FAN 320x320mm 845M3/HR 230VAC IP54 (11667102055)	\$ 834.50	
PF67.000-SL	FILTER FAN, SLIMLINE 320X 320mm, 725M3/HR 230VAC IP55 (11677103055)	\$ 1,107.30	


PFA10.000-109		GRILLE & FILTER 109x109mm FOR PF11.00 FAN	\$ 30.30
PFA20.000-145		GRILLE & FILTER 145x145mm FOR PF22.000 FAN	\$ 38.00
PFA20.000-145-B		GRILLE & FILTER 145x145mm FOR PF22.000 IP55 FAN - BLACK	\$ 73.50
PFA30.000-200		GRILLE & FILTER 202x202mm FOR PF32.000 FAN	\$ 64.70
PFA30.000-EMC		GRILLE & FILTER 202x202mm FOR PF32.000 FAN, EMC	\$ 268.60
PFA40.000-250		GRILLE & FILTER 252x252mm FOR PF43.000	\$ 83.70
PFA40.000-EMC		GRILLE & FILTER 252x252mm FOR PFA43.000 FAN, EMC	\$ 206.00
PFA60.000-320		GRILLE & FILTER 320x320mm FOR PF66/67 FAN	\$ 118.10
PFA60.000-320-IP55		GRILLE & FILTER 320x320mm FOR PF66 IP55 FAN	\$ 203.20

### Pfannenberg Top-Mounted Cabinet Fans


PTF60.500-230-IP54		FILTER FAN, TOP MOUNTED, 500M3/HR, 230VAC, IP54, (11685101055)	\$ 962.50
PTF60.700-230-IP54		FILTER FAN, TOP MOUNTED, 700M3/HR, 230VAC, IP54, (11687102055)	\$ 1,261.90
PTF60.700-MOTOR		FILTER FAN MOTOR, 230VAC FOR PTF60.700 (18611000044 )	\$ 377.70
PTF61.000-230-IP33		FILTER FAN, TOP MOUNTED, 1000M3/HR 230VAC, IP33, (11681100055)	\$ 1,351.90
PTF61.000-230-IP54		FILTER FAN, TOP MOUNTED, 700M3/HR 230VAC, IP54, (11681102055 )	\$ 1,273.20

\* Pfannenberg Air-Conditioning units for cabinets and switchboards also available - price on application \*


### Pfannenberg Cabinet Thermostats

FLZ510		THERMOSTAT, HEATING/COOLING, DIN RAIL MOUNT, 0-60DEG C, 1CO CONTACT	\$ 104.80
FLZ520		THERMOSTAT, HEATING, DIN RAIL MOUNT, 0-60DEG C, 1NC CONTACT	\$ 63.50
FLZ530		THERMOSTAT, COOLING, DIN RAIL MOUNT, 0-60DEG C, 1NO CONTACT	\$ 63.50
FLZ541		THERMOSTAT, HEATING/COOLING, DIN RAIL MOUNT, 0-60DEG C, 1NC+ NO CONTACT	\$ 89.30
FLZ600		HYGROSTAT, DIN RAIL MOUNT, 40-90% RH, 0-60DEG C, 1CO CONTACT	\$ 269.30
FLZ610		THERMOSTAT - HYGROSTAT, DIN RAIL MOUNT, 40-90% RH, 0-60DEG C, 1CO CONTACT	\$ 312.20

### Finder DIN Rail Mounting Cabinet Thermostats



7T.81-COOLING		THERMOSTAT, COOLING, DIN RAIL MOUNT, 0-60DEG C, N/O CONTACT, (2303)	\$ 60.40
7T.81-HEATING		THERMOSTAT, HEATING, DIN RAIL MOUNT, 0-60DEG C, N/C CONTACT, (2403)	\$ 60.40

### Finder Switchboard Lighting - with magnetic mounting brackets. On/Off switch or PIR

7L.46-024-1100		LED PANEL LIGHT, 1200 LUMENS 12-48VAC/DC, SWITCHED	\$ 209.10
7L.46-024-2100		LED PANEL LIGHT, 1200 LUMENS 12-48VAC/DC, PIR SENSOR	\$ 225.20
7L.46-230-1100		LED PANEL LIGHT, 1200 LUMENS 110-240VAC, SWITCHED	\$ 209.10
7L.46-230-2100		LED PANEL LIGHT, 1200 LUMENS 110-240VAC, PIR SENSOR	\$ 225.20

<https://carrel-electrade.co.nz/hdw/pdf/7l-series.pdf>



### Pfannenberg Cabinet Heaters

PRH010-M		ENCLOSURE HEATER, DIN RAIL MOUNT, 10 WATT, 230VAC	\$ 116.00
PRH020-M		ENCLOSURE HEATER, DIN RAIL MOUNT, 20 WATT, 230VAC	\$ 116.00
PRH030-M		ENCLOSURE HEATER, DIN RAIL MOUNT, 30 WATT, 230VAC	\$ 116.00
FLH045		ENCLOSURE HEATER, DIN RAIL MOUNT, 45 WATT, 230VAC	\$ 194.00
FLH060		ENCLOSURE HEATER, DIN RAIL MOUNT, 60 WATT, 230VAC	\$ 220.10
FLH075		ENCLOSURE HEATER, DIN RAIL MOUNT, 75 WATT, 230VAC	\$ 246.10
FLH100		ENCLOSURE HEATER, DIN RAIL MOUNT, 100 WATT, 230VAC	\$ 251.00
FLH100-TERM		ENCLOSURE HEATER WITH TERMINALS, DIN RAIL MOUNT, 100 WATT, 230VAC	\$ 164.50
FLH150		ENCLOSURE HEATER, DIN RAIL MOUNT, 150 WATT, 230VAC	\$ 305.10
FLH250		ENCLOSURE HEATER, DIN RAIL MOUNT, 250 WATT, 230VAC	\$ 374.10
FLH400		ENCLOSURE FAN HEATER, DIN RAIL MOUNT, 400W, 230VAC	\$ 396.60
FLH-T-1000		ENCLOSURE FAN HEATER WITH THERMOSTAT, DIN RAIL MOUNT, 1000W, 230VAC	\$ 687.40
FLH-T-250		ENCLOSURE FAN HEATER WITH THERMOSTAT, DIN RAIL MOUNT, 250W, 230VAC	\$ 482.60

A comprehensive range of air-conditioning systems and heat exchangers for cabinets and switch/computer rooms is also available from Pfannenberg on request

### Test Terminal Blocks

Front connecting, continuously rated for 30A at 50degC up to 600V, allowing easy for on-site testing of meters, relays and instrument transformers

TTB10WFC-TEST		TEST TERMINAL BLOCK, 10 WAY, FRONT CONNECTED, WITH VOLTAGE TEST POINTS	\$ 185.10
TTB13WFC		TEST TERMINAL BLOCK, 13 WAY FRONT CONNECT COMPLETE WITH COVER	\$ 171.90
TTB13W		TEST TERMINAL BLOCK, 13WAY FRONT CONNECT, WITHOUT COVER	\$ 171.90
TTB13WFC		TEST TERMINAL BLOCK, 13 WAY FRONT CONNECT COMPLETE WITH COVER	\$ 171.90
TTB13WFC-COVER		ACRYLIC COVER, STANDARD, FOR TTB13WFC	\$ 25.80
TTB13WFC-CVR-SPECIAL		ACRYLIC COVER, EXTENDED, FOR TTB13WFC 262x152x46.5mm	\$ 27.80

## Standoffs & Isolator Switches

Insulated Stand-offs with Octagonal flats and brass, metric threaded insert

I030EN	STAND-OFF INSULATOR 30mm H x 32mm W, M6 BRASS INSERT	\$ 10.50
I030EN-E	STAND-OFF INSULATOR 30mm H x 30mm W, M6 BRASS INSERT	\$ 10.50
I035EN	STAND-OFF INSULATOR 35mm H x 35mm W, M6 BRASS INSERT	\$ 10.50
I035EN-E	STAND-OFF INSULATOR 35mm H x 32mm W, M6 BRASS INSERT	\$ 10.50
I035FN	STAND-OFF INSULATOR 35mm H x 35mm W, M8 BRASS INSERT	\$ 10.50
I035FN-E	STAND-OFF INSULATOR 35mm H x 32mm W, M8 BRASS INSERT	\$ 10.50
I035GN-E	STAND-OFF INSULATOR 35mm H x 32mm W, M10 BRASS INSERT	\$ 10.50
I038GN	STAND-OFF INSULATOR 38mm H x 40mm W, M10 BRASS INSERT (I038-E)	\$ 10.50
I040EN	STAND-OFF INSULATOR 40mm H x 40mm W, M6 BRASS INSERT	\$ 10.50
I040EN-E	STAND-OFF INSULATOR 40mm H x 41mm W, M6 BRASS INSERT	\$ 10.50
I040FN	STAND-OFF INSULATOR 40mm H x 40mm W, M8 BRASS INSERT	\$ 10.50
I040GN	STAND-OFF INSULATOR 40mm H x 40mm W, M10 BRASS INSERT	\$ 10.50
I050FN	STAND-OFF INSULATOR 50mm H x 44mm W, M8 BRASS INSERT	\$ 14.00
I050GN	STAND-OFF INSULATOR 50mm x 44mm W, M10 BRASS INSERT	\$ 14.00
I050HN	STAND-OFF INSULATOR 50mm x 44mm W, M12 BRASS INSERT	\$ 14.00
I050HN-DB50/P	STAND-OFF INSULATOR 50mm x M12 STEEL INSERT	\$ 17.20
I050HN-E	STAND-OFF INSULATOR 50mm x 46mm W, M12 BRASS INSERT	\$ 14.00
I060GN	STAND-OFF INSULATOR 60mm H x 52mm W, M10 BRASS INSERT	\$ 15.80
I060GN-E	STAND-OFF INSULATOR 60mm H x 60mm W, M10 BRASS INSERT	\$ 15.80
I060HN	STAND-OFF INSULATOR 60mm x 55mm W, M12 BRASS INSERT	\$ 15.80
I075FN-MBS	STAND-OFF INSULATOR 75MM x M8 STEEL NSERT	\$ 36.40
I075GN	STAND-OFF INSULATOR 75mm H x 50mm W, M10 BRASS INSERT	\$ 17.60
I075HN	STAND-OFF INSULATOR 75mm x 62mm, M12 BRASS INSERT	\$ 17.60
I100-HEX-M16	STAND-OFF INSULATOR HEXAGONAL, 100mm H, M16 BRASS INSERT	\$ 17.60
I100-ROUND-M16	STAND-OFF INSULATOR, ROUND 100mm, M16 BRASS INSERT	\$ 30.60



OCTAGONAL CENTREBAND STANDOFF

### Cam-Operated Selector Switches

Insulated Stand-offs with Octagonal flats and brass, metric threaded insert

RT16-61312-B19	SELECTOR SWITCH, VOLTMETER, 3 PHASE LINE TO LINE, PANEL MOUNT	\$ 91.20
RT16-61313-B19	SELECTOR SWITCH, VOLTMETER, LINE TO LINE + LINE TO NEUTRAL, PANEL MOUNT	\$ 99.50
RT16-61325-B19	SELECTOR SWITCH, AMMETER, 4 POSITION, PANEL MOUNT	\$ 107.80

### Cam-Operated Isolator Switches

RT16-61025-B19	SELECTOR SWITCH, MAN-OFF-AUTO, 1POLE 16A	\$ 41.40
RT16-61027-B19	SELECTOR SWITCH, 1-0-2, 3POLE 16A	\$ 64.70
RT16-61027-B19-FHAB	SELECTOR SWITCH, MAINS-OFF-GEN, 3POLE 16A	\$ 59.40
RT16-61151-B19	SELECTOR SWITCH, 1-0-2, 1POLE 16A	\$ 41.40
RT16-61153-B19	SELECTOR SWITCH, 1-0-2, 3POLE 16A	\$ 64.70
RT16-61153-B19-FHAB	SELECTOR SWITCH, MAINS-OFF-GEN, 3POLE 16A	\$ 64.70
RT16-61191-B19	SELECTOR SWITCH, ON/OFF, PANEL MOUNT, 1POLE 16A	\$ 41.40
RT32-61025-B19	SELECTOR SWITCH, CHANGE-OVER, 1-0-2, 1 POLE 32A	\$ 64.70
RT32-61027-B19	SELECTOR SWITCH, CHANGE-OVER, 1-0-2, 3 POLE 32A	\$ 77.90
RT32-61151-B19	SELECTOR SWITCH, CHANGE-OVER, MAN-OFF-AUTO, 1 POLE 32A	\$ 64.70
RT32-61153-1/0/2	SELECTOR SWITCH, CHANGE-OVER, 1-0-2, 3POLE 32A	\$ 74.20
RT32-61153-B19	SELECTOR SWITCH, CHANGE-OVER, MAN-OFF-AUTO, 3POLE 32A	\$ 77.90
RT32-61194-B33	ISOLATOR SWITCH, LOCKABLE, ON-OFF, PANEL MOUNT, YELLOW-RED, 4POLE 32A	\$ 102.10
RT32-61199-B19	ISOLATOR SWITCH, LOCKABLE, ON-OFF, PANEL MOUNT, 3POLE 32A	\$ 77.90
S63-61027-B41	SELECTOR SWITCH, CHANGE OVER, REAR PANEL MOUNT, 3POLE 63A	\$ 157.50
S63-61191-B31	SELECTOR SWITCH, ON/OFF, REAR PANEL MOUNT, 3POLE 63A	\$ 132.70
S63-61194-B33	ISOLATOR SWITCH, LOCKABLE, ON-OFF, PANEL MOUNT, 4POLE 63A	\$ 116.10
S63-61199-B31	ISOLATOR SWITCH, LOCKABLE, ON-OFF, YELLOW-RED, 3POLE 63A, IP65 BOX	\$ 164.20
S63-61199-B41	SELECTOR SWITCH, ON-OFF, REAR PANEL MOUNT, 3POLE 63A	\$ 116.10
S100-61027-B41	SELECTOR SWITCH, CHANGE OVER, REAR PANEL MOUNT, 3POLE 100A	\$ 464.30
S100-61199-B41	SELECTOR SWITCH, ON/OFF, REAR PANEL MOUNT, 3POLE 100A	\$ 323.30



### Boxed Isolator Switches

RT16-61191-B31-G/B	ISOLATOR SWITCH, LOCKABLE, ON-OFF, GREY-BLACK, 1POLE 16A, IP65 BOX	\$ 54.80
RT16-61191-B31-Y/R	ISOLATOR SWITCH, LOCKABLE, ON-OFF, YELLOW-RED, 1POLE 16A, IP65 BOX	\$ 54.80
RT16-61191-B33-G/B	ISOLATOR SWITCH, LOCKABLE, ON-OFF, BLACK-GREY, PANEL MOUNT, 1POLE 16A	\$ 39.70
RT16-61191-B33-Y/R	ISOLATOR SWITCH, LOCKABLE, ON-OFF, YELLOW-RED, PANEL MOUNT, 1POLE 16A	\$ 39.70
RT32-61191-B31-G/B	ISOLATOR SWITCH, LOCKABLE, ON-OFF, GREY-BLACK, 1POLE 32A, IP65 BOX	\$ 64.70
RT32-61191-B31-Y/R	ISOLATOR SWITCH, LOCKABLE, ON-OFF, YELLOW-RED, 1POLE 32A, IP65 BOX	\$ 64.70
RT32-61191-B33-G/B	ISOLATOR SWITCH, LOCKABLE, ON-OFF, GREY-BLACK, 1POLE 32A, IP65 BOX	\$ 64.70



### Enclosure Pressure Relief Gland


PPC	PRESSURE COMPENSATING BREATHER GLAND M12	\$ 17.20
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## Wiring Terminals


### Standard DIN Rail Mounting Terminals

SCRW2.5U		FEED THROUGH SCREW TERMINAL, GREY, 2.5mm2	\$ 2.30
SCRW4U		FEED THROUGH SCREW TERMINAL, GREY, 4mm2 GREY	\$ 2.50
SCRW6U		FEED THROUGH SCREW TERMINAL, GREY, 6mm2	\$ 3.00
SCRW10U		FEED THROUGH SCREW TERMINAL, GREY, 10mm2	\$ 3.40
SCRW16U		FEED THROUGH SCREW TERMINAL, GREY, 16mm2	\$ 4.50
SCRW25U		FEED THROUGH SCREW TERMINAL, GREY, 25mm2	\$ 6.30
SCRW35U		FEED THROUGH SCREW TERMINAL, GREY, 35mm2	\$ 10.30
SCRW50U		FEED THROUGH SCREW TERMINAL, GREY, 50mm2	\$ 33.10
SCRW95U		FEED THROUGH SCREW TERMINAL, GREY, 95mm2	\$ 54.50
SCRW4U 1-2		FEED THROUGH SCREW TERMINAL, GREY, 4mm2, 1 IN 2 OUT	\$ 4.00
SCRW4U-BLACK	FEED THROUGH SCREW TERMINAL, BLACK, 4mm2	\$ 2.90	
SCRW4U-BLUE	FEED THROUGH SCREW TERMINAL, BLUE, 4mm2	\$ 2.90	
SCRW4U-GREEN	FEED THROUGH SCREW TERMINAL, GREEN, 4mm2	\$ 2.90	
SCRW4U-ORANGE	FEED THROUGH SCREW TERMINAL, ORANGE, 4mm2	\$ 2.90	
SCRW4U-PINK	FEED THROUGH SCREW TERMINAL, PINK, 4mm2	\$ 2.90	
SCRW4U-RED	FEED THROUGH SCREW TERMINAL, RED, 4mm2	\$ 2.90	
SCRW4U-WHITE	FEED THROUGH SCREW TERMINAL, WHITE, 4mm2	\$ 2.90	
SCRW4U-YELLOW	FEED THROUGH SCREW TERMINAL, YELLOW, 4mm2	\$ 2.90	
G4		EARTH TERMINAL, SCREW TYPE, 4mm2	\$ 8.80
G10		EARTH TERMINAL, SCREW TYPE, 10mm2	\$ 11.70
G16		EARTH TERMINAL, SCREW TYPE, 16mm2	\$ 13.10
G35		EARTH TERMINAL, SCREW TYPE, 35mm2	\$ 30.10


### Spring Clamp DIN Rail Mounting Terminals

CAGE2.5		FEED THROUGH SPRING CLAMP TERMINAL, 2.5mm2	\$ 2.90
CAGE2.5 1-2		FEED THROUGH SPRING CLAMP TERMINAL, 2.5mm2, 1 IN 2 OUT	\$ 2.90
CAGE4		FEED THROUGH SPRING CLAMP TERMINAL, 4mm2	\$ 3.30
CAGE4 1-2		FEED THROUGH SPRING CLAMP TERMINAL, 4.0mm2, 1 IN 2 OUT	\$ 5.30
CAGE6		FEED THROUGH SPRING CLAMP TERMINAL, 6mm2	\$ 3.90
CAGEG2.5		EARTH TERMINAL SPRING CLAMP, 2.5mm2	\$ 2.00
CAGEG4		EARTH TERMINAL, SPRING CLAMP, 4mm	\$ 2.60
CAGEG6		EARTH TERMINAL SPRING CLAMP 6mm	\$ 3.80
CAGEP2.5 2-2		FEED THROUGH SPRING CLAMP TERMINAL, 2.5mm2, 2 IN 2 OUT	\$ 4.90

### Special DIN Rail Mounting Terminals

DBLOFF4U		FEED THROUGH SCREW TERMINAL, OFFSET DOUBLE LEVEL, 4mm2,	\$ 6.40
DDDFL4U		FEED THROUGH FUSED TERMINAL, DOUBLE LEVEL, 4mm2	\$ 14.90
F4U		FUSED SCREW TERMINAL 4mm2	\$ 8.30
F4U(L)/12V		FUSED SCREW TERMINAL 4mm c/w LED 12V	\$ 14.10
F4U(L)/220V		FUSED SCREW TERMINAL 4mm2 WITH LED 220VAC	\$ 14.10
F4U(L)/24V		FUSED SCREW TERMINAL 4mm2 WITH LED 24VAC/DC	\$ 14.10
KN4U		KNIFE DISCONNECT TERMINAL 4mm2	\$ 8.10
DISCT6U		DISCONNECT TEST TERMINAL 6mm2	\$ 10.30
DISCT6US		DISCONNECT TEST TERMINAL 6mm2 FOR CTS	\$ 10.30
TAB4U		FEED THROUGH TERMINAL 6.3 mm SPADE CONNECTION	\$ 4.50
TL2.5U	FEED THROUGH TERMINAL TRIPLE LEVEL, GREY, 2.5mm2	\$ 18.30	
P4	MINI PANEL MOUNT TERMINAL 4mm2	\$ 2.30	
M4	FEED THROUGH MICRO TERMINAL 4mm2 FOR 15mm RAIL	\$ 2.30	

### End Plates and Spacers for Terminals

EPSCRW2.5U/4U		END PLATE FOR SCRW2.5U/4U TERMINAL	\$ 1.00
EPSCRW6U/10U		END PLATE FOR SCRW6U/10U TERMINAL	\$ 1.00
EPSCRW16U		END PLATE FOR SCRW16U TERMINAL	\$ 1.20
EPSCRW25U		END PLATE FOR SCRW25U TERMINAL	\$ 1.60
EPSCRW35U		END PLATE FOR SCRW35U TERMINAL	\$ 1.80
EPSCRW4U 1-2		END PLATE FOR CMC1X2 TERMINAL	\$ 1.80
EPDBLOFF4U		END PLATE, FRONT SIDE, FOR DBLOFF4U, TERMINAL	\$ 2.50
EPDBLOFF4UA		END PLATE, REAR SIDE FOR DBLOFF4U, TERMINAL	\$ 1.80
EPDDL4U		END PLATE FOR DDFL4U, TERMINAL	\$ 2.90
EPDISCT6U		END PLATE FOR DISCT6US, TERMINAL	\$ 2.10
EPKN4U		END PLATE FOR CKT4U TERMINAL	\$ 1.60
EPM4		END PLATE FOR M4 TERMINAL	\$ 1.00
EPTAB4U		END PLATE FOR CTC4U TERMINAL	\$ 1.80
EPP4		END PLATE FOR CMB4 TERMINAL	\$ 1.30
EPTL2.5U		END PLATE FOR CTL2.5U TERMINAL	\$ 2.90
EPCAGE2.5		END PLATE FOR CAGE2.5 TERMINAL	\$ 1.50
EPCAGE2.5U		END PLATE FOR CAGE2.5 1-2 TERMINAL	\$ 1.50
EPCAGE4	END PLATE FOR CAGE4 TERMINAL	\$ 2.30	
EPCAGE6	END PLATE FOR CAGE6 TERMINAL	\$ 2.80	

## Partition Plates for Terminals

PPSCRW2.5U/4U	PARTITION PLATE FOR CTS2.5UN/CTS4UN TERMINAL	\$ 1.10
PPSCRW6U/10U	PARTITION PLATE FOR CTS6U/CTS10U TERMINAL	\$ 1.50
PPSCRW25U	PARTITION PLATE FOR CTS25U TERMINAL	\$ 2.00
PPSCRW35U	PARTITION PLATE FOR CTS35U TERMINAL	\$ 2.00
PPF4U	PARTITION PLATE FOR F4U TERMINAL	\$ 2.30
PPM4	PARTITION PLATE FOR M4 TERMINAL	\$ 1.10

## Wiring Terminals, Connectors & DIN Rail

### Compact Distribution Blocks – 125A Input/65A Output

DISBL10/2	2 WAY DISTRIBUTION BLOCK, 10mm2	\$ 59.70
DISBL10/3	3 WAY DISTRIBUTION BLOCK, 10mm2	\$ 71.30
DISBL10/4	4 WAY DISTRIBUTION BLOCK, 10mm2	\$ 81.20

## Neutral/Earth Terminal Stations-Mount on NEB6 OR NEB10 Busbar,available in blue(neutral) or green (earth)

GN4-BLUE	NEUTRAL CLAMP CONNECTOR 4mm2 - BLUE	\$ 1.30
GN4-GREEN	EARTH CLAMP CONNECTOR 4mm2 - GREEN	\$ 1.30
GN16-BLUE	BLUE - NEUTRAL CLAMP CONNECTOR 16mm2	\$ 1.60
GN16-GREEN	GREEN - EARTH CLAMP CONNECTOR 16mm2	\$ 1.60
GN35-BLUE	NEUTRAL CLAMP CONNECTOR 35mm2 - BLUE	\$ 3.00
GN35-GREEN	EARTH CLAMP CONNECTOR 35mm2 - GREEN	\$ 3.00

## Mounting Accessories for terminals

ES1N	TERMINAL END CLAMP FOR 15mm DIN RAIL	\$ 2.40
ES2N	TERMINAL END CLAMP FOR 35mm DIN RAIL	\$ 2.40
B1S	DIN RAIL MOUNTING BRACKET (ANGLE TYPE)	\$ 2.40
PASL05/10	INTERNAL JUMPER 10-WAY FOR SCRW2.5U TERMINAL	\$ 8.60
PASL06/10	INTERNAL JUMPER 10-WAY FOR SCRW4U/CMB4 TERMINAL	\$ 8.60
PASL08/10	INTERNAL JUMPER 10-WAY FOR SCRW6U TERMINAL	\$ 8.60
PASL10/10	INTERNAL JUMPER 10-WAY FOR SCRW10U TERMINAL	\$ 9.30
PASL12/10	INTERNAL JUMPER 10-WAY FOR SCRW25U TERMINAL	\$ 12.20
PASL15/10	INTERNAL JUMPER 10-WAY FOR SCRW35U TERMINAL	\$ 12.80
PASL6/10A	INTERNAL JUMPER 10 WAY FOR DDFL4U TERMINAL	\$ 11.00
CL08/10	COMBLINK 10-WAY FOR CDTTU	\$ 10.80
CL6/10	COMBLINK 10-WAY FOR SCRW4U/CMC1x2	\$ 9.60
CL6/10A	COMBLINK 10-WAY FOR CKT4U	\$ 9.60
CL6/10B	COMBLINK 10-WAY FOR CMB4/ODL4U/CDL4U	\$ 9.60
CL6/10C	COMBLINK 10-WAY FOR TL2.5U	\$ 9.60
CL8/10A	COMBLINK 10-WAY FOR CSFL4U/DDFL4U	\$ 5.70
SL-PUSHIN5	PUSH-ON SHORTING LINK FOR CAGE2.5 TERMINAL	\$ 1.50
SL-PUSHIN5B	SHORTING LINK WIRE 110mm FOR CAGE2.5 TERMINAL	\$ 3.80
SL-PUSHIN6	PUSH-ON SHORTING LINK FOR CSC4T TERMINAL	\$ 2.50
SL-PUSHIN6A	PUSH-ON SHORTING LINK FOR CSC4 TERMINAL	\$ 3.90
SL-PUSHIN6B	SHORTING LINK 110mm FOR CSC4T TERMINAL	\$ 4.90
SL-PUSHIN8	PUSH-ON SHORTING LINK FOR CSC6T TERMINAL	\$ 3.30

## Mounting Rails for Terminals

CA601/S	DIN RAIL, 15mm, SLOTTED PLATED STEEL, 1M LENGTH	\$ 13.30
CA701/P	DIN RAIL, 35MM PLAIN PLATED STEEL,1M LENGTH	\$ 14.10
CA701/S	DIN RAIL, 35MM, SLOTTED PLATED STEEL, 1M LENGTH	\$ 14.10
CA701/S-125	DIN RAIL, 35MM, SLOTTED PLATED STEEL,125mm LENGTH	\$ 19.00
NB6-6	NEUTRAL- EARTH BAR 6x6mm - 1 METRE LENGTH	\$ 44.10
NBS	NEUTRAL- EARTH BAR SUPPORT FOR NB6 AND NB10	\$ 2.00

## Marking Tags for Terminals

CA509 Series push-on marking tags are sold in strips of 10 identical numbers for K2-K8 types,strips of 5 identical numbers for K10-K15 types and are available numbered from 1-10 or blank. Other decades(eg,10-20,40-50) and consecutively numbered strips are available on ident only

KM/10-1	MARKING TAG, 5-STRIP, TYPE K10 - No. 1	\$ 2.00
KM/10-10	MARKING TAG, 5-STRIP, TYPE K10 - No. 10	\$ 2.00
KM/10-2	MARKING TAG, 5-STRIP, TYPE K10 - No. 2	\$ 2.00
KM/10-3	MARKING TAG, 5-STRIP, TYPE K10 - No. 3	\$ 2.00
KM/10-4	MARKING TAG, 5-STRIP, TYPE K10 - No. 4	\$ 2.00
KM/10-5	MARKING TAG, 5-STRIP, TYPE K10 - No. 5	\$ 2.00
KM/10-6	MARKING TAG, 5-STRIP, TYPE K10 - No. 6	\$ 2.00
KM/10-7	MARKING TAG, 5-STRIP, TYPE K10 - No. 7	\$ 2.00
KM/10-8	MARKING TAG, 5-STRIP, TYPE K10 - No. 8	\$ 2.00
KM/10-9	MARKING TAG, 5-STRIP, TYPE K10 - No. 9	\$ 2.00
KM/10-BLANK	MARKING TAG, 5-STRIP, TYPE K10 - BLANK	\$ 2.00
KM/12-1	MARKING TAG, 5-STRIP, TYPE K12 - No. 1	\$ 2.00
KM/12-10	MARKING TAG, 5-STRIP, TYPE K12 - No. 10	\$ 2.00
KM/12-2	MARKING TAG, 5-STRIP, TYPE K12 - No. 2	\$ 2.00
KM/12-3	MARKING TAG, 5-STRIP, TYPE K12 - No. 3	\$ 2.00
KM/12-4	MARKING TAG, 5-STRIP, TYPE K12 - No. 4	\$ 2.00
KM/12-5	MARKING TAG, 5-STRIP, TYPE K12 - No.5	\$ 2.00
KM/12-6	MARKING TAG, 5-STRIP, TYPE K12 - No. 6	\$ 2.00
KM/12-7	MARKING TAG, 5-STRIP, TYPE K12 - No. 7	\$ 2.00
KM/12-8	MARKING TAG, 5-STRIP, TYPE K12 - No. 8	\$ 2.00

## Marking Tags for Terminals

KM/12-9	MARKING TAG, 5-STRIP, TYPE K12 - No. 9	\$ 2.00
KM/12-BLANK	MARKING TAG, 5-STRIP, TYPE K12 - BLANK	\$ 2.00
KM/15-1	MARKING TAG, 5-STRIP, TYPE K15 - No. 1	\$ 2.00
KM/15-10	MARKING TAG, 5-STRIP, TYPE K15 - No. 10	\$ 2.00
KM/15-2	MARKING TAG, 5-STRIP, TYPE K15 - No. 2	\$ 2.00
KM/15-3	MARKING TAG, 5-STRIP, TYPE K15 - No. 3	\$ 2.00
KM/15-4	MARKING TAG, 5-STRIP, TYPE K15 - No. 4	\$ 2.00
KM/15-5	MARKING TAG, 5-STRIP, TYPE K15 - No. 5	\$ 2.00
KM/15-6	MARKING TAG, 5-STRIP, TYPE K15 - No. 6	\$ 2.00
KM/15-7	MARKING TAG, 5-STRIP, TYPE K15 - No. 7	\$ 2.00
KM/15-8	MARKING TAG, 5-STRIP, TYPE K15 - No. 8	\$ 2.00
KM/15-9	MARKING TAG, 5-STRIP, TYPE K15 - No. 9	\$ 2.00
KM/15-BLANK	MARKING TAG, 5-STRIP, TYPE K15 - BLANK	\$ 2.00
KM/2-0	MARKING TAG, 10-STRIP, TYPE K2 - No. 0	\$ 1.60
KM/2-1	MARKING TAG, 10-STRIP, TYPE K2 - No. 1	\$ 1.60
KM/2-10	MARKING TAG, 10-STRIP, TYPE K2 - No. 10	\$ 1.60
KM/2-11	MARKING TAG, 10-STRIP TYPE K2 - No 11	\$ 1.60
KM/2-12	MARKING TAG, 10-STRIP, TYPE K2 - No. 12	\$ 1.60
KM/2-13	MARKING TAG, 10-STRIP, TYPE K2 - No.13	\$ 1.60
KM/2-14	MARKING TAG, 10-STRIP, TYPE K2 - No.14	\$ 1.60
KM/2-15	MARKING TAG, 10-STRIP, TYPE K2 - No.15	\$ 1.60
KM/2-16	MARKING TAG, 10-STRIP, TYPE K2 - No.16	\$ 1.60
KM/2-17	MARKING TAG, 10-STRIP, TYPE K2 - No. 17	\$ 1.60
KM/2-18	MARKING TAG, 10-STRIP, TYPE K2 - No. 18	\$ 1.60
KM/2-19	MARKING TAG, 10-STRIP, TYPE K2 - No.19	\$ 1.60
KM/2-2	MARKING TAG, 10-STRIP, TYPE K2 - No. 2	\$ 1.60
KM/2-20	MARKING TAG, 10-STRIP, TYPE K2 - No. 20	\$ 1.60
KM/2-3	MARKING TAG, 10-STRIP, TYPE K2 - No. 3	\$ 1.60
KM/2-4	MARKING TAG, 10-STRIP, TYPE K2 - No. 4	\$ 1.60
KM/2-5	MARKING TAG, 10-STRIP, TYPE K2 - No. 5	\$ 1.60
KM/2-6	MARKING TAG, 10-STRIP, TYPE K2 - No. 6	\$ 1.60
KM/2-7	MARKING TAG, 10-STRIP, TYPE K2 - No. 7	\$ 1.60
KM/2-8	MARKING TAG, 10-STRIP, TYPE K2 - No. 8	\$ 1.60
KM/2-9	MARKING TAG, 10-STRIP, TYPE K2 - No. 9	\$ 1.60
KM/2-BLANK	MARKING TAG, 10-STRIP, TYPE K2 - BLANK	\$ 1.60
KM/5-1	MARKING TAG, 10-STRIP, TYPE K5 - No. 1	\$ 1.60
KM/5-10	MARKING TAG, 10-STRIP, TYPE K5 - No. 10	\$ 1.60
KM/5-2	MARKING TAG, 10-STRIP, TYPE K5 - No. 2	\$ 1.60
KM/5-3	MARKING TAG, 10-STRIP, TYPE K5 - No. 3	\$ 1.60
KM/5-4	MARKING TAG, 10-STRIP, TYPE K5 - No. 4	\$ 1.60
KM/5-5	MARKING TAG, 10-STRIP, TYPE K5 - No. 5	\$ 1.60
KM/5-6	MARKING TAG, 10-STRIP, TYPE K5 - No. 6	\$ 1.60
KM/5-7	MARKING TAG, 10-STRIP, TYPE K5 - No. 7	\$ 1.60
KM/5-8	MARKING TAG, 10-STRIP, TYPE K5 - No. 8	\$ 1.60
KM/5-9	MARKING TAG, 10-STRIP, TYPE K5 - No. 9	\$ 1.60
KM/5-BLANK	MARKING TAG, 10-STRIP, TYPE K5 - BLANK	\$ 1.60
KM/6-1	MARKING TAG, 10-STRIP, TYPE K6 - No. 1	\$ 1.60
KM/6-10	MARKING TAG, 10-STRIP, TYPE K6 - No. 10	\$ 1.60



**Marking Tags for Terminals**

KM/6-11	MARKING TAG, 10-STRIP, TYPE K6 - No. 11	\$ 1.60
KM/6-12	MARKING TAG, 10-STRIP, TYPE K6 - No.12	\$ 1.60
KM/6-13	MARKING TAG, 10-/STRIP, TYPE K6 -No 13	\$ 1.60
KM/6-14	MARKING TAG, 10-STRIP, TYPE K6 No 14	\$ 1.60
KM/6-15	MARKING TAG, 10-STRIP, TYPE K6 No 15	\$ 1.60
KM/6-16	MARKING TAG, 10-STRIP, TYPE K6 No16	\$ 1.60
KM/6-17	MARKING TAG, 10-STRIP, TYPE K6 No 17	\$ 1.60
KM/6-18	MARKING TAG, 10-STRIP, TYPE K6 - No18	\$ 1.60
KM/6-19	MARKING TAG, 10-STRIP, TYPE K6, No19	\$ 1.60
KM/6-2	MARKING TAG, 10-STRIP, TYPE K6 - No. 2	\$ 1.60
KM/6-20	MARKING TAG, 10-STRIP, TYPE K6, No20	\$ 1.60
KM/6-21	MARKING TAG, 10-STRIP, TYPE K6, No21	\$ 1.60
KM/6-22	MARKING TAG, 10-STRIP, TYPE K6 No 22	\$ 1.60
KM/6-23	MARKING TAG, 10-STRIP, TYPE K6, No23	\$ 1.60
KM/6-24	MARKING TAG, 10-STRIP, TYPE K6, No24	\$ 1.60
KM/6-25	MARKING TAG, 10-STRIP, TYPE K6, No 25	\$ 1.60
KM/6-26	MARKING TAG, 10-STRIP, TYPE K6 No26	\$ 1.60
KM/6-27	MARKING TAG, 10-STRIP, TYPE K6, No27	\$ 1.60
KM/6-3	MARKING TAG, 10-STRIP, TYPE K6 - No. 3	\$ 1.60
KM/6-4	MARKING TAG, 10-STRIP, TYPE K6 - No. 4	\$ 1.60
KM/6-5	MARKING TAG, 10-STRIP, TYPE K6 - No. 5	\$ 1.60
KM/6-6	MARKING TAG, 10-STRIP, TYPE K6 - No. 6	\$ 1.60
KM/6-7	MARKING TAG, 10-STRIP, TYPE K6 - No. 7	\$ 1.60
KM/6-8	MARKING TAG, 10-STRIP, TYPE K6 - No. 8	\$ 1.60
KM/6-9	MARKING TAG, 10-STRIP, TYPE K6 - No. 9	\$ 1.60
KM/6-AMB	MARKING TAG, 10-STRIP, TYPE K6 AMB""	\$ 1.60
KM/6-BLANK	MARKING TAG, 10-STRIP, TYPE K6 - BLANK	\$ 1.60
KM/6-DR	MARKING TAG, 10-STRIP, TYPE K6 DR""	\$ 1.60
KM/6-GRN	MARKING TAG, 10-STRIP, TYPE K6 GRN""	\$ 1.60
KM/6-N	MARKING TAG, 10-STRIP, TYPE K6, N""	\$ 1.60
KM/6-P	MARKING TAG, 10-STRIP, TYPE K6, P""	\$ 1.60
KM/6-P1	MARKING TAG, 10-STRIP, TYPE K6, P1""	\$ 1.60
KM/6-P2	MARKING TAG, 10-STRIP, TYPE K6, P2""	\$ 1.60
KM/6-P3	MARKING TAG, 10-STRIP, TYPE K6, P3""	\$ 1.60
KM/6-P4	MARKING TAG, 10-STRIP, TYPE K6, P4""	\$ 1.60
KM/6-PH	MARKING TAG, 10-STRIP, TYPE K6, 'PH'	\$ 1.60
KM/6-R	MARKING TAG, 10-STRIP, TYPE K6, R""	\$ 1.60
KM/6-SL	MARKING TAG, 10-STRIP, TYPE K6, SL	\$ 1.60
KM/6-TR	MARKING TAG, 10-STRIP, TYPE TR	\$ 1.60
KM/8-1	MARKING TAG, 10-STRIP, TYPE K8 - No. 1	\$ 1.60
KM/8-10	MARKING TAG, 10-STRIP, TYPE K8 - No. 10	\$ 1.60
KM/8-2	MARKING TAG, 10-STRIP, TYPE K8 - No. 2	\$ 1.60
KM/8-3	MARKING TAG, 10-STRIP, TYPE K8 - No. 3	\$ 1.60
KM/8-4	MARKING TAG, 10-STRIP, TYPE K8 - No. 4	\$ 1.60
KM/8-5	MARKING TAG, 10-STRIP, TYPE K8 - No. 5	\$ 1.60
KM/8-6	MARKING TAG, 10-STRIP, TYPE K8 - No. 6	\$ 1.60
KM/8-7	MARKING TAG, 10-STRIP, TYPE K8 - No. 7	\$ 1.60
KM/8-8	MARKING TAG, 10-STRIP, TYPE K8 - No. 8	\$ 1.60
KM/8-9	MARKING TAG, 10-STRIP, TYPE K8 - No. 9	\$ 1.60
KM/8-BLANK	MARKING TAG, 10-STRIP, TYPE K8 - BLANK	\$ 1.60

## Distribution Blocks and Terminals

### MOREK Switchboard Accessories

A range of Distribution Blocks and Terminals for Electrical Switchboards

MO-BLOCK2P-125A-11		DISTRIBUTION BLOCK, 2 POLE, 2x35 + 2x25 + 7x6mm, MAB125A-11	\$ 44.10
MO-BLOCK2P-125A-15		DISTRIBUTION BLOCK, 2 POLE, 2x35 + 2x25 + 11x6mm <sup>2</sup> , MAB125A-15	\$ 49.20
MO-BLOCK4P-125A-15		DISTRIBUTION BLOCK, 4 POLE, 2x10-35 + 11x1.5-6/ 2 X10-25, MAB126A-15	\$ 72.50
MO-MAB16X5		TERMINAL PLATE, 5xCu 2.5-16 mm 5x124A 690V, MAB16x5	\$ 55.40
MO-MAB16X5-COVER		TERMINAL PLATE SEALING COVER, MAB16x5	\$ 10.10
MO-MH25		GLAND PLATE, MH25 MULTIGATE 25 WAY IP55 RAL 9005 BLACK	\$ 56.70
MO-OJL-200A		DISTRIBUTION BLOCK, IN Cu/Al1x10-70mm OUT Cu 6x 2.5-16mm MAB1201S10	\$ 74.30
MO-OJL-280A		DISTRIBUTION BLOCK, IN Cu/Al 1x120 OUT Cu 2x35mm, 5x16mm, 4x10mm MAB1281S10	\$ 118.30
MO-OJL-400A		DISTRIBUTION BLOCK, IN Cu/Al 1x 240mm, OUT Cu 3x50mm, 4x 35mm MAB1401S10	\$ 147.30
MO-OL240-2		HEAVY DUTY CONNECTOR, 2 x Cu/Al 95-240mm <sup>2</sup> MAJ2240E10	\$ 105.45
MO-OTH240-3		UNIVERSAL TERMINAL, 3xAl/Cu 85-240mm 800A, MAC3240A14	\$ 151.10
MO-OTH240-4		UNIVERSAL TERMINAL, 4xAl/Cu 85-240mm 1250A, MAC4240A14	\$ 139.70
MO-OTH300-2		UNIVERSAL TERMINAL, 2xAl/Cu 70-3000mm 800A, MAC2300A14	\$ 88.05
MO-OTL150		UNIVERSAL TERMINAL, GREY,1xAl/Cu 25-150mm <sup>2</sup> 1000V, MAA1150A10	\$ 46.30
MO-OTL16		UNIVERSAL TERMINAL, GREY,1xAl/Cu 1.5-16mm <sup>2</sup> 1000V, MAA1016A10	\$ 12.20
MO-OTL240-2		UNIVERSAL TERMINAL, GREY, 2xAl/Cu 35-240mm <sup>2</sup> 1000V, MAA2240A10	\$ 117.98
MO-OTL35		UNIVERSAL TERMINAL, GREY,1xAl/Cu 2.5-35mm <sup>2</sup> 1000V, MAA1035A10	\$ 12.20
MO-OTL35-3		UNIVERSAL TERMINAL, GREY, 3x1xAl/Cu 2,5-35mm <sup>2</sup> 1000V, MAA1335A10	\$ 28.70
MO-OTL35-5		UNIVERSAL TERMINAL, GREY, blue,yel/gr 5x1xAl/Cu 2,5-35mm <sup>2</sup> 1000V, MAA5035A10	\$ 63.20
MO-OTL95	UNIVERSAL TERMINAL, GREY,1xAl/Cu 6-95mm <sup>2</sup> 1000V, MAA1095A10	\$ 23.50	
MO-PE12H		EARTH BAR GREEN PE12H 12x16mm IP20 (pack of 10pcs)	\$ 151.10
MO-PE7H		EARTH BAR GREEN PE7H 7x16mm IP20 (pack of 10 pcs)	\$ 88.10
MO-N12H		NEUTRAL BAR BLUE N12H 12x16mm IP20 (pack of 10pcs)	\$ 151.10
MO-N7H		NEUTRAL BAR BLUE N7H 7x16mm IP20 (pack of 10pcs)	\$ 88.10

## Electrical Transducers

### CEL Current Transducers

A range of locally designed and manufactured transducers inspired by the a range of locally designed and manufactured transducers inspired by the requirements of New Zealand Industry. Available in a variety of enclosure styles, CI 0.5 accuracy, IEC 60688

#### CT-IL CT Mounted Transducer - 5A to 4 - 20mA Loop

The CT-IL is a small (45 x 30 x 46mm) loop-powered transducer that mounts on a standard CT with a 5A secondary via an adhesive strip, to provide a 4-20mA current loop using an auxiliary 10 to 30Vdc power supply injected into the loop. Ideal for retro-fit applications as well as new installations

CT-IL-5A-4/20MA



CURRENT TRANSDUCER, LOOP POWERED, CT MOUNTED, 5A IN 4-20mA OUT

\$ 179.80

#### T-ILE DIN-Rail Mounted Transducer - 5A to 4 - 20mA Loop

T-ILE integral CT, multi-range loop powered, 4 to 20mA output, enclosure 25 Jumper selectable input range. DIN rail mount

TILE4L  
TILE4H



CURRENT TRANSDUCER, LOOP POWERED, 5-20A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 25-100A IN, 4-20mA OUT

\$ 318.60  
\$ 318.60

#### T-ILC Mounted Transducer - 5A to 4 - 20mA Loop

T-ILC integral CT, loop powered, 4 to 20mA output. Surface or DIN rail mount

TILC-5A-12MMBORE  
TILC-10A-12MMBORE  
TILC-15A-12MMBORE  
TILC-20A-12MMBORE  
TILC-25A-12MMBORE  
TILC-50A-12MMBORE  
TILC-50A-18MMBORE  
TILC-100A-18MMBORE  
TILC-150A-18MMBORE  
TILC-200A-18MMBORE  
TILC-250A-18MMBORE  
CARREL-DIN-RAIL



CURRENT TRANSDUCER, LOOP POWERED, 12mm BORE, 5A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 12mm BORE, 10A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 12mm BORE, 15A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 12mm BORE, 20A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 12mm BORE, 25A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 12mm BORE, 50A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 18mm BORE, 50A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 18mm BORE, 100A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 18mm BORE, 150A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 18mm BORE, 200A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 18mm BORE, 250A IN, 4-20mA OUT  
DIN ADAPTOR for T1KW1

\$ 272.30  
\$ 272.30  
\$ 272.30  
\$ 272.30  
\$ 272.30  
\$ 272.30  
\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 7.30

#### T-ILA DIN-Rail Mounted Transducer - 5A to 4 - 20mA Loop

T-ILA integral CT, loop powered, 4 to 20mA output. DIN rail mount

TILA-5A-12MMBORE  
TILA-10A-12MMBORE  
TILA-15A-12MMBORE  
TILA-25A-12MMBORE  
TILA-50A-12MMBORE  
TILA-100A-12MMBORE  
TILA-50A-18MMBORE  
TILA-100A-18MMBORE  
TILA-150A-18MMBORE  
TILA-200A-18MMBORE  
TILA-250A-18MMBORE  
TILA-400A-18MMBORE



CURRENT TRANSDUCER, LOOP POWERED, 12mm BORE, 5A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 12mm BORE, 10A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 12mm BORE, 15A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 12mm BORE, 25A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 12mm BORE, 50A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 12mm BORE, 100A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 18mm BORE, 50A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 18mm BORE, 100A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 18mm BORE, 150A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 18mm BORE, 200A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 18mm BORE, 250A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 18mm BORE, 400A IN, 4-20mA OUT

\$ 272.30  
\$ 272.30  
\$ 272.30  
\$ 272.30  
\$ 272.30  
\$ 272.30  
\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 318.60

Please consult our website for individual Electrical Transducer specifications

# Electrical Transducers

## Technical Competence and Economy

Carrel Electrade Limited's range of Electrical Transducers are designed and manufactured by us to provide a technically competent and cost effective solution to the measurement of electrical parameters. The range has been developed to meet the requirements of both the New Zealand Power Industry and our manufacturing industries.

Production costs are minimised through continually improving design, SMD componentry and efficient production techniques. Most standard requirements can be satisfied by using a combination of LP and T series devices. Transducers can also be modified or custom-built by our engineers to meet the requirements of unusual applications and demanding specifications.

## Standards

All transducers are designed to exceed the requirements of the international standard IEC 60688 "Electrical measuring transducers for converting ac electrical quantities to analogue or digital signals". Other standards applying to the units are the safety standard IEC 60414 and the insulation standard IEC 60255 clauses 5, 6 and 8.

## Accuracy

The standard accuracy of LP and T Series transducers is Class 0.5 (0.5% of span) as defined by IEC 60688. Where a higher level of accuracy is justified LP Series transducers can be calibrated to Class 0.2 on special request. Transducers are individually calibrated and tested, and individual test results are available in hard copy on request.

## Safety

A high galvanic separation exists between inputs, outputs and the auxiliary supply circuit to ensure the safety of sensitive equipment in the measurement system. The outputs are current and voltage limited and incorporate surge protection to minimise the risk of damage due to faults or over voltage transients.

## EMC Compliance

The LP and T Series are electromagnetically compatible (EMC) with the requirements of CISPR 11 edition 2 1990 in this respect and are C-Tick approved.

## MODBUS RS485 Communications

Several of the LP-Series transducers offer the option of digital output on RS485 using the industry standard MODBUS RTU protocol.

## Enclosure

All enclosures are manufactured in grey self-extinguishing PPO plastic. The DIN 43880 case style has a simple clip on DIN rail mounting for DIN rail (EN 60715, 35mm DIN rail). Connections are by rising cage screw terminals with a maximum cable size of 4mm<sup>2</sup>

## LP and T Series General Specifications - Conforming with IEC 60688

<b>Inputs</b>	Current: 1A, 5A (others on request) Voltage: All ac systems voltages to 440V Frequency: 50Hz, 60Hz (400Hz on request)
<b>Analogue output (Load independent dc current or voltage)</b>	: 0 to 10mA dc < 1500Ω load : -10 to 0 to +10mA dc < 1500Ω load : 0 to 20mA dc < 750Ω load : -20mA to 0 to +20mA < 750Ω load : 4 to 20mA dc < 750Ω load : 0 to +5V dc > 2kΩ load : -5 to 0 to +5V dc > 2kΩ load : 0 to +10V dc > 2kΩ load : -10 to 0 to +10V dc > 2kΩ load Response time: <250ms (0 - 99%) at full load (faster times on special request) Ripple: <1% peak to peak (of full output span) Load influence: <0.25% of full span for specific load range
<b>Digital output</b>	RS485 twisted pair cable up to 1200m long Baud rate: 9600 or 19200 no parity 8 bit Bus load: up to 32 nodes on a bus Protocol: MODBUS RTU with node addressing 1 to 32, others on request Data register: Unsigned or signed word at location 40001
<b>Pulse output</b>	Relay: 2A 110V <10W dc non inductive Opto-coupler: NPN 30V 5mA
<b>Overload</b>	Current input: 2 x nominal continuous :20 x nominal for 3 seconds Voltage: 1.2 x nominal continuous 1.5 x nominal for 10 seconds S/C output: continuous O/C output: continuous, VO/C <30V Maximum output: 2 x nominal output
<b>Accuracy</b>	Class: 0.5 (0.5% of full output span) Range: 20 to 120% (LP-VS, LP-VSX3) - 0 to 120% (all others) Drift: < +0.5% over the range 0°C to +23°C to +60°C - 0.1% per annum non cumulative
<b>Influences affecting Accuracy - Watt and var transducers: (transducers to Class 0.2 (+0.2% of span) can be manufactured to order)</b>	Input voltage: <+0.25% (Vin 80% to 100% to 120%) Input waveform distortion: <1.0% distortion factor 0 to 0.2 Unbalanced input currents: <0.5% (balanced types) Interaction in elements: <0.25% Variation due to power factor: <+0.25% (PF 0.5 - 1 - 0.5)
<b>Auxiliary supply (specify on ordering)</b>	: 24V, 110V, 230V or 240V ac +20% 1.5VA : 24V or 110V dc +20% 2W Other auxiliary supply voltages made to order
<b>Isolation</b>	Galvanic isolation between inputs, output and auxiliary supply (where specified) Test voltage : 4kV 50Hz ac for 1 minute Impulse : 5kV 1.2/50µsec waveform
<b>Temperature</b>	Operating : 0°C to +23°C to +60°C Storage : -25°C to +70°C long term : -55°C to +85°C short term

**Please consult our website for individual Electrical Transducer specifications**

# Electrical Transducers

LP-Series Transducers Standard Range Selection Chart					
MODEL	TYPE	OPERATION	AUX. POWER	OUTPUT OPTIONS	CASE
LP-IS	Current	Single phase arithmetic mean	Self	A, B, D, E	3M
LP-IP	Current	Single phase arithmetic mean	AC/DC	A, B, C, D, E	3M
LP-IL	Current	Single phase arithmetic mean	DC loop	C	3M
LP-ISX3	Current	3 phase arithmetic mean	Self	A, B, D, E	9M
LP-IRMS	Current	Single phase rms responding	AC/DC	A, B, C, D, E	4M
LP-ID	Current	Single phase arithmetic mean	AC/DC	M	4M
LP-VS	Voltage	Single phase arithmetic mean	Self	A, B, D, E	3M
LP-VP	Voltage	Single phase arithmetic mean	AC/DC	A, B, C, D, E	3M
LP-VL	Voltage	Single phase arithmetic mean	DC loop	C	3M
LP-VSX3	Voltage	3 phase arithmetic mean	Self	A, B, D, E	9M
LP-VP-DSW	Voltage	Single phase arithmetic mean dual slope/window	AC/DC	A, B, C, D, E	6M
LP-VRMS	Voltage	Single phase rms responding	AC/DC	A, B, C, D, E	4M
LP-VD	Voltage	Single phase arithmetic mean	AC/DC	M	4M
LP-TR	Temperature	Pt100 temperature sensing	AC/DC	A, B, C, D, E	3M
LP-TRD	Temperature	Pt100 temperature sensing	AC/DC	M	4M
LP-CDU	DC Voltage/Current	Galvanic separation	AC/DC	A1, B1, C, D1, E1	4M
LP-CDD	DC Voltage/Current	Galvanic separation	AC/DC	M	4M
LP-TPR	Tap change	Resistive potentiometer tap change	AC/DC	A, B, C, D, E	3M
LP-1W1	Watt	Single phase load	AC/DC	A1, B1, C, D1, E1, M, P	6M*
LP-1W3	Watt	3 phase 3 wire balanced load	AC/DC	A1, B1, C, D1, E1, M, P	6M*
LP-1W4	Watt	3 phase 4 wire balanced load	AC/DC	A1, B1, C, D1, E1, M, P	6M*
LP-2W3	Watt	3 phase 3 wire unbalanced load	AC/DC	A1, B1, C, D1, E1, M, P	6M*
LP-2.5W4	Watt	3 phase 4 wire unbalanced load	AC/DC	A1, B1, C, D1, E1, M, P	6M*
LP-1V3	Var	3 phase 3 wire balanced load	AC/DC	A1, B1, C, D1, E1, M, P	6M*
LP-2V3	Var	3 phase 3 wire unbalanced load	AC/DC	A1, B1, C, D1, E1, M, P	6M*
LP-2.5V4	Var	3 phase 4 wire unbalanced load	AC/DC	A1, B1, C, D1, E1, M, P	6M*
LP-KVAP	kVA-hour	kVA-hour 3 phase pulse output	Self	P	4M
LP-PF1	Phase angle	Single phase power factor	AC/DC	A, B, C	4M
LP-PF3	Phase angle	3 phase balanced load power factor	AC/DC	A, B, C	4M

**Output Codes**

A = 0 to 10mA dc <1500 Ohms  
 B = 0 to 20mA dc <750 Ohms  
 C = 4 to 20mA dc <750 Ohms  
 D = 0 to +5V dc >2k Ohms  
 E = 0 to +10V dc >2k Ohms  
 M = RS485 MODBUS RTU protocol 9.6k/19.2k Baud  
 P = pulse, contacts 2A 110V <10W dc (non inductive)

A1 = -10 to 0 to +10mA dc <1500 Ohms  
 B1 = -20 to 0 to +20mA dc <750 Ohms  
 D1 = -5 to 0 to +5V dc >2k Ohms  
 E1 = -10 to +10V dc >2k Ohms

\* NOTE case style 9M for M or P output option



3M enclosure



6M enclosure



9M enclosure



## Electrical Transducers

### Current Transducers

#### LP-IL loop powered – enclosure 3M

LPIL-1A-4-20MA  
LPIL-5A-4-20MA  
LPIL-NON-STD



CURRENT TRANSDUCER, LOOP POWERED, 1A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 5A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, NON STANDARD INPUT

\$ 289.60  
\$ 289.60  
\$ 329.20

#### LP-IS self powered-Enclosure 3M

LPIS-1A-10MA  
LPIS-1A-20MA  
LPIS-5A-10MA  
LPIS-5A-10V  
LPIS-5A-20MA  
LPIS-NON-STD  
LPIS-V  
LPISX3



CURRENT TRANSDUCER, SELF POWERED, 1A IN, 0-10mA OUT  
CURRENT TRANSDUCER, SELF POWERED, 1A IN, 0-20mA OUT  
CURRENT TRANSDUCER, SELF POWERED, 5A IN, 0-10mA OUT  
CURRENT TRANSDUCER, SELF POWERED, 5A IN, 0-10V OUT  
CURRENT TRANSDUCER, SELF POWERED, 5A IN, 0-20mA OUT  
CURRENT TRANSDUCER, SELF POWERED, NON-STANDARD INPUT  
CURRENT TRANSDUCER, SELF POWERED, VOLTAGE OUTPUT  
CURRENT TRANSDUCER, SELF POWERED, 3 PHASE

\$ 280.20  
\$ 280.20  
\$ 280.20  
\$ 338.40  
\$ 280.20  
\$ 338.40  
\$ 338.40  
\$ 658.30

#### LP-IRMS separately powered RMS responding – enclosure 4M

LPIRMS

CURRENT TRANSDUCER, RMS RESPONDING

\$ 462.70

#### T-IL loop powered, 4 to 20mA output, enclosure 25

TIL-1A-4-20MA  
TIL-5A-4-20MA



CURRENT TRANSDUCER, LOOP POWERED, 1A IN, 4-20mA OUT  
CURRENT TRANSDUCER, LOOP POWERED, 5A IN, 4-20mA OUT

\$ 289.60  
\$ 289.60

#### T-IS self powered – enclosure 55

TIS-1A-10MA  
TIS-1A-20MA  
TIS-5A-10MA  
TIS-5A-20MA  
TIS-5A-V  
TIS-NON-STD

CURRENT TRANSDUCER, SELF POWERED, 1A IN, 0-10mA OUT  
CURRENT TRANSDUCER, SELF POWERED, 1A IN, 0-20mA OUT  
CURRENT TRANSDUCER, SELF POWERED, 5A IN, 0-10mA OUT  
CURRENT TRANSDUCER, SELF POWERED, 5A IN, 0-20mA OUT  
CURRENT TRANSDUCER, SELF POWERED, 5A IN, 0-10V OUT  
CURRENT TRANSDUCER, SELF POWERED, NON STANDARD INPUT AND OUTPUT

\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 343.70

#### T-IP separately powered, 4 to 20mA output – enclosure 55

TIP-110V-1A-4-20MA  
TIP-110V-5A-4-20MA  
TIP-230V-1A-4-20MA  
TIP-230V-5A-4-20MA  
TIP-400V-1A-4-20MA  
TIP-400V-5A-4-20MA  
TIP-NON-STD  
LPDC-SURCHARGE

CURRENT TRANSDUCER, SEPARATELY POWERED, 110VAC SUPPLY, 1A IN, 4-20mA OUT  
CURRENT TRANSDUCER, SEPARATELY POWERED, 110VAC SUPPLY, 5A IN, 4-20mA OUT  
CURRENT TRANSDUCER, SEPARATELY POWERED, 230VAC SUPPLY, 1A IN, 4-20mA OUT  
CURRENT TRANSDUCER, SEPARATELY POWERED, 230VAC SUPPLY, 5A IN, 4-20mA OUT  
CURRENT TRANSDUCER, SEPARATELY POWERED, 400VAC SUPPLY, 1A IN, 4-20mA OUT  
CURRENT TRANSDUCER, SEPARATELY POWERED, 400VAC SUPPLY, 5A IN, 4-20mA OUT  
CURRENT TRANSDUCER, SEPARATELY POWERED, NON STANDARD SUPPLY, INPUT AND OUTPUT  
DC AUXILIARY POWER SUPPLY FOR LP SERIES TRANSDUCERS

\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 318.60  
\$ 370.10  
\$ 123.70

**Please consult our website for individual Electrical Transducer specifications**

# Electrical Transducers

## Voltage Transducers

### LP-VL loop powered – enclosure 3M

LPVL VOLTAGE TRANSDUCER, LOOP POWERED (CUSTOM SPECIFICATION) \$ 305.40

### LP-VS self powered – enclosure 3M

LPVS-150V-20MA	VOLTAGE TRANSDUCER, RMS ARITHMETIC MEAN, SELF POWERED, 150VAC-0-20mA	\$ 296.10
LPVS-300V-20MA	VOLTAGE TRANSDUCER, RMS ARITHMETIC MEAN, SELF POWERED, 300VAC-0-20mA	\$ 296.10
LPVS-500V-20MA	VOLTAGE TRANSDUCER, RMS ARITHMETIC MEAN, SELF POWERED, 500VAC-0-20mA	\$ 296.10
LPVS-CURRENT-OUTPUT	VOLTAGE TRANSDUCER, RMS ARITHMETIC MEAN, SELF POWERED, CURRENT OUTPUT	\$ 338.40
LPVS-VOLT-OUTPUT	VOLTAGE TRANSDUCER, RMS ARITHMETIC MEAN, SELF POWERED, VOLTAGE OUTPUT	\$ 338.40
LPVSX3	VOLTAGE TRANSDUCER 3 PHASE, RMS ARITHMETIC MEAN, SELF POWERED	\$ 658.30



### LP-VP separately powered – enclosure 3M

LPVP-150V-4-20MA-230	VOLTAGE TRANSDUCER, SEPARATELY POWERED, AUX SUPPLY 230VAC	\$ 437.60
LPVP-270V-4-20MA-24D	VOLTAGE TRANSDUCER, SEPARATELY POWERED, AUX SUPPLY 24VDC	\$ 527.50
LPVP-NON-STD	VOLTAGE TRANSDUCER, SEPARATELY POWERED - NONSTANDARD INPUT	\$ 437.60

### LP-VP-DSW separately powered, window / dual slope – enclosure 6M

LPVP-DSW	VOLTAGE TRANSDUCER, SEPARATELY POWERED, DUAL SLOPE/WINDOW	\$ 527.50
LPVP-WINDOW	VOLTAGE TRANSDUCER, SEPARATELY POWERED - WINDOW TYPE	\$ 437.60



### LP-VRMS separately powered rms responding – enclosure 4M

LPVRMS VOLTAGE TRANSDUCER, RMS RESPONDING (CUSTOM SPECIFICATION) \$ 527.50

### T-VL loop powered, 4 to 20mA output – enclosure 25

TVL	VOLTAGE TRANSDUCER, LOOP POWERED (CUSTOM SPECIFICATION)	\$ 346.30
TVL-WINDOW	VOLTAGE TRANSDUCER, WINDOW TYPE, LOOP POWERED (CUSTOM SPECIFICATION)	\$ 404.50

### T-VS self powered, 0 to 20mA output – enclosure 55

TVS-150V-20MA	VOLTAGE TRANSDUCER, WINDOW TYPE, SEPARATELY POWERED	\$ 576.30
TVS-300V-20MA	VOLTAGE TRANSDUCER, SELF POWERED, 150VAC IN, 0-20mA OUT	\$ 362.20
TVS-500V-20MA	VOLTAGE TRANSDUCER, SELF POWERED, 300VAC IN, 0-20mA OUT	\$ 362.20
TVS-NON-STD	VOLTAGE TRANSDUCER, SELF POWERED, 500VAC IN, 0-20mA OUT	\$ 362.20

### T-VP separately powered – enclosure 55

TVP-150V-4-20MA-110V	VOLTAGE TRANSDUCER, WINDOW TYPE, LOOP POWERED (CUSTOM SPECIFICATION)	\$ 404.50
TVP-150V-4-20MA-230V	VOLTAGE TRANSDUCER, SEPARATELY POWERED, 150VAC IN, 4-20mA OUT, AUX 110VAC	\$ 543.40
TVP-250V-4-20MA-230V	VOLTAGE TRANSDUCER, SEPARATELY POWERED, 150VAC IN, 4-20mA OUT, AUX 230VAC	\$ 543.40
TVP-500V-4-20MA-110V	VOLTAGE TRANSDUCER, SEPARATELY POWERED, 250VAC IN, 4-20mA OUT, AUX 230VAC	\$ 543.40
TVP-500V-4-20MA-230V	VOLTAGE TRANSDUCER, SEPARATELY POWERED, 500VAC IN, 4-20mA OUT, AUX 110VAC	\$ 543.40
TVP-500V-4-20MA-400V	VOLTAGE TRANSDUCER, SEPARATELY POWERED, 500VAC IN, 4-20mA OUT, AUX 230VAC	\$ 543.40
TVP-DSW	VOLTAGE TRANSDUCER, SEPARATELY POWERED, 500VAC IN, 4-20mA OUT AUX 400VAC	\$ 543.40
TVP-NON-STD	VOLTAGE TRANSDUCER, DUAL-SLOPE, SEPARATELY POWERED	\$ 633.30
TVP-WINDOW	VOLTAGE TRANSDUCER, SEPARATELY POWERED, NON-STANDARD INPUT/OUTPUT	\$ 543.40



## Watt Transducers

LP1W1	WATT TRANSDUCER, SINGLE PHASE, CT INPUT, PULSE OR ANALOGUE OUTPUT	\$ 675.50
LP1W3	WATT TRANSDUCER, 3PHASE 3WIRE BALANCED LOAD, CT INPUT, ANALOGUE OUTPUT	\$ 675.50
LP1W4	WATT TRANSDUCER, 3PHASE 4WIRE BALANCED LOAD, CT INPUT, ANALOGUE	\$ 675.50
LP2W3	WATT TRANSDUCER, 3 PHASE 3 WIRE, UNBALANCED LOAD, CT INPT ANALOGUE OUTPUT	\$ 873.80
LP2-5W4	WATT TRANSDUCER, 3PHASE 4WIRE UNBALANCED LOAD, CT INPUT, ANALOGUE OUTPUT	\$ 906.80
T1W1	WATT TRANSDUCER, SINGLE PHASE, CT INPUT, ANALOGUE OUTPUT	\$ 774.60
T1W3	WATT TRANSDUCER, 3 PHASE 3 WIRE BALANCED LOAD, CT INPUT, ANALOGUE OUTPUT	\$ 774.60
T1W4	WATT TRANSDUCER, 3 PHASE 4 WIRE BALANCED LOAD, CT INPUT, ANALOGUE OUTPUT	\$ 774.60
T2W3	WATT TRANSDUCER 3 PHASE 3 WIRE UNBALANCED LOAD	\$ 906.80
T2-5W4	WATT TRANSDUCER, 3 PHASE 4 WIRE UNBALANCED LOAD, CT INPUT, ANALOGUE OUTPUT	\$ 906.80
T3W4	WATT TRANSDUCER, 3 PHASE 4WIRE UNBALANCED LOAD	\$ 906.80



## Surcharges


LPDC-SURCHARGE	DC AUXILIARY POWER SUPPLY FOR LP SERIES TRANSDUCERS	\$ 123.70
LP-MODBUS-OUTPUT	MODBUS OPTION FOR LP TRANSDUCERS	\$ 179.80

Please consult our website for individual Electrical Transducer specifications




## Electrical Transducers

### Signal Converters/Isolators

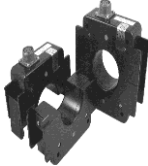
LPCDD		UNIDIRECTIONAL DC SIGNAL CONVERTER PT100 INPUT	\$	470.60
LPCDU-M-BI		SIGNAL CONVERTER, BI OR UNI DIRECTIONAL DC, MULTI INPUT/OUTPUT OPTIONS	\$	346.30
LPCDU-V-UNI		SIGNAL CONVERTER, UNIDIRECTIONAL DC VOLTAGE INPUT, 4-20mA OUT ONLY	\$	346.30
LPCDUBP-HALL		SIGNAL CONVERTER, BIPOLAR DC HALL SENSOR INPUT	\$	346.30

### Hall Effect Sensors

TR101-OCS-100A		HALL EFFECT CURRENT TRANSDUCER, INPUT 100A , OUTPUT +4Vdc, SUPPLY +-15Vdc	\$	108.00
TR201-OCS-200A		HALL EFFECT CURRENT TRANSDUCER, INPUT 200A , OUTPUT +4Vdc, SUPPLY +-15Vdc	\$	108.00
TR301-OCS-300A		HALL EFFECT CURRENT TRANSDUCER, INPUT 300A , OUTPUT +4Vdc, SUPPLY +-15Vdc	\$	108.00
TR401-OCS-400A		HALL EFFECT CURRENT TRANSDUCER, INPUT 400A , OUTPUT +4Vdc, SUPPLY +-15Vdc	\$	108.00
TR501-OCS-500A		HALL EFFECT CURRENT TRANSDUCER, INPUT 500A , OUTPUT +4Vdc, SUPPLY +-15Vdc	\$	108.00

Other models and ratios available - Please contact us

### Split-Core Hall Effect Transducers


TN301-OCS		SPLIT CORE HALL EFFECT CURRENT TRANSDUCER, 300A, OUTPUT +4Vdc, SUPPLY 15Vdc	\$	217.10
TN501-OCS		SPLIT CORE HALL EFFECT CURRENT TRANSDUCER, 500A, OUTPUT +4Vdc, SUPPLY 15Vdc	\$	217.10
CTH-501FLS		SPLIT CORE HALL EFFECT CURRENT TRANSDUCER 500A	\$	1,570.60
CTH-801HMS		SPLIT CORE HALL EFFECT CURRENT TRANSDUCER 800A	\$	1,859.20

Other models and ratios available - Please contact us

### Signal converters – enclosure 55

TCDU	SIGNAL CONVERTER, UNIDIRECTIONAL INPUTS-OUTPUTS	\$	421.80
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### Signal isolators – enclosure 25

TCDL-5V		SIGNAL ISOLATOR, 3 WIRE INPUT 4-20mA OR 0-5V OUTPUT	\$	305.40
TCDL-10V		SIGNAL ISOLATOR, 3 WIRE INPUT 4-20mA OR 0-10V OUTPUT	\$	305.40
TCDL-4-20MA		SIGNAL ISOLATOR, LOOP POWERED, IN/PUT AND OUTPUT 4-20mA	\$	289.60
TCDL-NON-STD		SIGNAL ISOLATOR, NON STANDARD INPUTS AND OUTPUTS	\$	305.40

### Surcharges for dc auxiliary power supplies (not loop powered)

TDC-SURCHARGE	DC AUXILIARY POWER SUPPLY FOR T SERIES TRANSDUCERS	\$	123.70
LPDC-SURCHARGE	DC AUXILIARY POWER SUPPLY FOR LP SERIES TRANSDUCERS	\$	123.70

### Integrator – enclosure 55

TINTP	INTEGRATOR, PULSE OUTPUT	\$	560.50
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### Multi Input/Output Signal Transducer


DIN rail mounted Signal Transducer offering 16 analogue input/output configurations via DIP switch, 22.5mm wide, 24vdc supply voltage

TR-UNI-2SC3		SIGNAL TRANSDUCER, 16 INPUT/OUTPUT OPTIONS	\$	202.10
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**Please consult our website for individual Electrical Transducer specifications**

## Temperature, Frequency, Tachometer & Pulse Relays

### Temperature Monitoring (Thermistor Trip) Relays

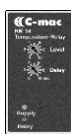
71.91-024		THERMISTOR TRIP RELAY, PTC, AUTO RESET, 1 NO10A@250VAC, 230VAC	\$	224.70
71.91-230		THERMISTOR TRIP RELAY, PTC, AUTO RESET, 2 CO10A@250VAC, 24VAC/DC	\$	363.60
71.92-024		- obsolete - THERM TRIP REMOTE RESET DPDT 230VAC	\$	363.60
71.92-230		THERMISTOR TRIP RELAY, PTC, MANUAL RESET, 2 CO 8A@250VAC, 24-240VAC/DC	\$	323.90
PMM-T				

### Crouzet Frequency & Speed Monitoring Relays

HHZ		FREQUENCY RELAY, 40-70HZ, 2CO 5A@250VAC 120-277VAC	\$	427.90
HSV		SPEED SENSING RELAY, PNP-NPN-NAMUR-V OR CONTACT INPUT, 24-240VAC/DC	\$	391.30

### RM34 – Temperature Sensing Relay


For use with Pt100 sensors, built-in cable resistance compensation, -50°C to + 200°C in 4 switch selectable ranges, adjustable set point and reaction time delay

RM34-230V		TEMPERATURE CONTROL RELAY, 11 PIN, PT100, 4 RANGES, 2 CO 5A@250VAC, 230VAC AUX	\$	240.50
ZB11		RELAY BASE, 11 PIN, DIN RAIL MOUNT, 400VAC RATED	\$	21.10


Extra charge for isolated DC supply, see below

### RF20 Frequency Monitoring Relay

Selectable 50Hz/60Hz nominal frequency, adjustable bandwidth from 1Hz to 10Hz, selectable delay 0.1 sec or 1 sec, 2-pole output relay 5A/250VAC

RF20-230VAC		FREQUENCY RELAY, 50 OR 60HZ, ADJUSTABLE 1-10HZ, SELECTABLE TIME DELAY	\$	367.50
ZB11		RELAY BASE, 11 PIN, DIN RAIL MOUNT, 400VAC RATED	\$	21.10


### RR10 – Tachometer Relay

RR10-220V-2000RPM		TACHOMETER RELAY, 11 PIN, 2000 RPM PNP/NPN INPUT, 1CO 8A@250VAC, 230VAC	\$	403.20
RR10-220V-200RPM		TACHOMETER RELAY, 11 PIN, 200 RPM PNP/NPN INPUT, 1CO 8A@250VAC, 230VAC	\$	403.20
RR10-230V-20K		TACHOMETER RELAY, 11 PIN, 20K RPM PNP/NPN INPUT, 1CO 8A@250VAC, 230VAC	\$	403.20
RR10-NON-STK		TACHOMETER RELAY, 11 PIN - NON STANDARD SETUP	\$	436.20

### RD53 – Pulse Preselect or Pulse Divide Relay

Relay activation after pre-selected number of pulses. Accepts pulse input from mechanical contacts, NPN sensor, Namur sensor outputs.

Pulse divide, e.g. after 10 pulses relay activates then resets. Thumb wheel digital setting from 2 to 999 pulses

RD53-220V		PULSE DIVIDER-COUNTER RELAY, 11 PIN, NPN-NAMUR INPUT, 1CO 8A@250VAC, 230VAC	\$	403.20
ZB11		RELAY BASE, 11 PIN, DIN RAIL MOUNT, 400VAC RATED	\$	21.10
CMAC-DC-SUPPLY-12		DC POWER SUPPLY, 12-50VDC, FOR COMADAN RELAYS	\$	189.10
CMAC-DC-SUPPLY-48		DC POWER SUPPLY, 85-370VDC, FOR COMADAN RELAYS	\$	310.70





## Voltage Monitoring Relays

### FINDER Voltage Control Relays

A full range of DIN rail mounting single and three-phase voltage control relays for accurate monitoring and control of under and/or overvoltage conditions. The 70.11 is a 17.5mm wide single phase monitoring unit, while the 70.31/41/42 and 71.31 are 35mm wide 3 phase units. All models offer window mode (under + overvoltage), and 70.41 offers optional neutral neutral loss monitoring

70.11-230



70.11-230

VOLTAGE MONITORING RELAY, UNDER+OVER, 170-270VAC, SPDT/10A 230V CONTACT

\$ 198.30

### CROUZET Voltage Control Relays

A full range of DIN rail mounting single and three-phase voltage control relays for accurate monitoring and control of under and/or overvoltage conditions. The MU models are 17.5mm wide, while the H series are 35mm wide. These relays monitor their own supply (self-powered)

MUS-12  
MUS-80  
MUS-260  
MUSF-80  
MUSF-240



VOLTAGE CONTROL RELAY 9-15VDC, 1CO 5A@250VAC ( 84872140)  
VOLTAGE CONTROL RELAY 20-80VAC/DC, 1CO 5A@250VAC (84872141)  
VOLTAGE CONTROL RELAY 65-260VAC/DC, 1CO 5A@250VAC ( 84872142)  
UNDER/OVER VOLTAGE RELAY ,20-80VAC/DC, 1CO 5A@250VAC ( 84872151)  
UNDER/OVER VOLTAGE RELAY, 65-260V, 1CO 5A@250VAC (84872152)

\$ 353.10  
\$ 353.10  
\$ 353.10  
\$ 406.30  
\$ 406.30

H3US  
H3USN

VOLTAGE CONTROL RELAY, 3 x 220-480V L-L  
VOLTAGE CONTROL RELAY, 3 x 120-277V L-N

\$ 294.60  
\$ 355.30

### BROYCE Voltage Control Relays

True R.M.S. current monitoring from 20-500Vac/dc, selectable over or under voltage monitoring with adjustable hysteresis, trip level and time delay. Supply voltage 24-230Vac/dc, SPDT 8A relay output,17.5mm wide DIN rail mounting

LMCVR-20V  
LMCVR-500V



VOLTAGE MONITOR RELAY, OVER OR UNDER, 1, 2, 5, 20VAC/DC RANGE, 24-230VAC/DC AUX  
VOLTAGE MONITOR RELAY, OVER OR UNDER, 2-500VAC/DC RANGE, 24-230VAC/DC AUX

\$ 161.70  
\$ 161.70

Windowed function true R.M.S. current monitoring relay from 12-240Vac/dc offering under and over voltage monitoring , selectable over and under voltage trip levels and time delay. Isolated supply voltage 24-230Vac/dc, SPDT 8A relay output , 17.5mm wide DIN rail mounting

LMWVR



VOLTAGE MONITOR WINDOW TYPE 12-240VAC/DC, 24-230VAC

\$ 155.90

Under voltage monitor designed for battery applications, 17.5mm wide DIN rail mounting, with adjustable time delay (1-30s). Supply voltage 12-24 Vdc

LBVR/A

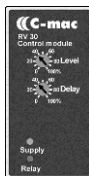
BATTERY VOLTAGE MONITOR RELAY, 8-30VDC

\$ 121.30

### COMADAN RV Series Voltage Monitoring Relays

Voltage monitoring relays with adjustable hysteresis (DC version) and adjustable set point and time delay (AC/DC version) selectable relay inversion. 11-pin plug-in.

RV20-220V-60MV  
RV20-230V-5V  
RV20-230V-10V  
RV20-230V-50V  
RV30-1-1-115-3  
RV30-1-1-230-1  
RV30-1-1-230-2  
RV30-1-1-230-3  
RV30-1-4-012-1  
RV30-1-4-012-2  
RV30-1-4-012-3  
RV30-1-4-048-3



VOLTAGE SENSING RELAY,11 PIN, 3-60mVDC INPUT, 2CO 5A@250VAC,230VAC AUX  
VOLTAGE SENSING RELAY,11 PIN, 0.25-5VDC INPUT, 2CO 5A@250VAC,230VAC AUX  
VOLTAGE SENSING RELAY,11 PIN, 0.5-10VDC INPUT, 2CO 5A@250VAC,230VAC AUX  
VOLTAGE SENSING RELAY,11 PIN, 2.5-50VDC INPUT, 2CO 5A@250VAC,230VAC AUX  
VOLTAGE SENSING RELAY, 11 PIN, 5-500VAC/DC INPUT, 1CO 8A@250VAC, 115VAC AUX  
VOLTAGE SENSING RELAY, 11 PIN, 3mV-1VAC/DC INPUT, 1CO 8A@250VAC, 230VAC AUX  
VOLTAGE SENSING RELAY, 11 PIN, 0.5-50VAC/DC INPUT, 1CO 8A@250VAC, 230VAC AUX  
VOLTAGE SENSING RELAY, 11 PIN, 5-500VAC/DC INPUT, 1CO 8A@250VAC, 230VAC AUX  
VOLTAGE SENSING RELAY, 11 PIN, 3mV-1VAC/DC INPUT, 1CO 8A@250VAC, 12-50VDC AUX  
VOLTAGE SENSING RELAY, 11 PIN, 0.5V-50VAC/DC INPUT, 1CO 8A@250VAC, 12-50VDC AUX  
VOLTAGE SENSING RELAY, 11 PIN, 5V-500VAC/DC INPUT, 1CO 8A@250VAC, 12-50VDC AUX  
VOLTAGE SENSING RELAY, 11 PIN, 5V-500VAC/DC INPUT, 1CO 8A@250VAC, 85-370VDC AUX

\$ 257.80  
\$ 257.80  
\$ 257.80  
\$ 257.80  
\$ 390.00  
\$ 390.00  
\$ 390.00  
\$ 390.00  
\$ 390.00  
\$ 579.00  
\$ 579.00  
\$ 579.00  
\$ 579.00

CMAC-DC-SUPPLY-12  
CMAC-DC-SUPPLY-48

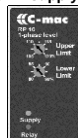
DC POWER SUPPLY, 12-50VDC, FOR COMADAN RELAYS  
DC POWER SUPPLY, 85-370VDC, FOR COMADAN RELAYS

\$ 189.10  
\$ 310.70

### COMADAN RP10 – Single Phase Voltage Monitoring Relay

Single phase under & overvoltage (own supply) monitoring relay, DPDT 8A relay, separate adjustments for upper and lower limits, 11-pin plug-in

RP10-110V  
RP10-230V  
RP10-240V  
RP10-24VDC



1 PHASE UNDER/OVER VOLTAGE RELAY, 11 PIN, 2CO 5A@250VAC, 110VAC AUX  
1 PHASE UNDER/OVER VOLTAGE RELAY, 11 PIN, 2CO 5A@250VAC, 230VAC AUX  
1 PHASE UNDER/OVER VOLTAGE RELAY, 11 PIN, 2CO 5A@250VAC, 240VAC AUX  
1 PHASE UNDER/OVER VOLTAGE RELAY, 11 PIN, 2CO 5A@250VAC, 24VDC AUX

\$ 261.70  
\$ 261.70  
\$ 261.70  
\$ 261.70

### COMADAN RP30 Series 3-Phase Voltage Level Monitoring Relays

3-phase, phase-phase and phase-neutral under & overvoltage monitoring relays with adjustable upper and lower limit, monitors their own supply, 11-pin plug-in

RP30-110V  
RP30-220V  
RP30-400V  
RP30-415V  
RP33-110V  
RP33-230V  
RP33-400V  
RP33-415V

3 PHASE UNDER/OVER VOLTAGE RELAY, 11 PIN,1CO 8A@250VAC, 110VAC  
3 PHASE UNDER/OVER VOLTAGE RELAY,11 PIN,1CO 8A@250VAC, 230VAC  
3 PHASE UNDER/OVER VOLTAGE RELAY,11 PIN,1CO 8A@250VAC, 400VAC  
3-PHASE-NEUTRAL VOLTAGE RELAY, WITH DELAY,11 PIN,1CO 8A@250VAC, 110VAC  
3-PHASE-NEUTRAL VOLTAGE RELAY, WITH DELAY, 11 PIN,1CO 8A@250VAC, 230VAC  
3-PHASE-NEUTRAL VOLTAGE RELAY, WITH DELAY, 11 PIN,1CO 8A@250VAC, 400VAC  
3-PHASE-NEUTRAL VOLTAGE RELAY, WITH DELAY, 11 PIN,1CO 8A@250VAC, 415VAC

\$ 427.00  
\$ 460.00  
\$ 427.00  
\$ 379.40  
\$ 432.30  
\$ 379.40  
\$ 412.40

ZB11

RELAY BASE, 11 PIN, DIN RAIL MOUNT, 400VAC RATED

\$ 21.10

## Earth Leakage Control Relays, Motor Protection Relay

### GIC Digital Phase and Voltage monitoring relay

Configurable Digital Phase and Voltage monitoring relay. Selectable Over/Under Voltage, asymmetry, phase loss, phase sequence, over/under frequency. Two separately programmable relay outputs. fail safe or non-fail safe configurable.

DMS120



DIGITAL PHASE FAILURE AND VOLTAGE MONITORING RELAY-145-500VAC

\$ 262.50

<https://www.carrel-electrade.co.nz/relays/pdf/dms120.pdf>

### Broyce Control Earth Leakage Relays

"Type A" Earth Leakage Relays, designed to monitor and detect true R.M.S. earth fault currents (up to 30A) in conjunction with a separate C.T. , adjustable sensitivity (30mA to 30A), adjustable time delay (0-10s), LED bargraph provides constant indication of any leakage current. 2 x relay outputs standard and Positive Safety Output. 44mm wide, DIN rail mounting

ELRM44V3/2-230VAC  
ELRM44V3/2-24VAC  
ELRM44V-30-115/230  
ELRM44V-30-24VAC



EARTH LEAKAGE RELAY TYPE A" 0.03-3A  
EARTH LEAKAGE RELAY TYPE A" 0.03-3A  
EARTH LEAKAGE RELAY TYPE A" 0.03-30A  
EARTH LEAKAGE RELAY TYPE A" 0.03-30A

\$ 50.19  
\$ 50.19  
\$ 43.30  
\$ 43.54

### Core-balanced toroidal CTs for use with Type A Earth Leakage Relays

BZCT035  
BZCT070  
BZCT120  
BZCT160  
BZCT210



CT CORE BALANCED, 35mm BORE, FOR USE WITH ELRM44V  
CT CORE BALANCED, 70mm BORE, FOR USE WITH ELRM44V  
CT CORE BALANCED, 120mm BORE, FOR USE WITH ELRM44V  
CT CORE BALANCED, 160mm BORE, FOR USE WITH ELRM44V  
CT CORE BALANCED, 210mm BORE, FOR USE WITH ELRM44V



\$ 207.90  
\$ 304.90  
\$ 304.90  
\$ 346.50  
\$ 429.70

BZCT035

BZCT120

Other CT sizes available on indent

### Motor Protection Relays Maximum protection for pumps and motors without using level sensors

Ideal for protection of pump motors in industrial and agricultural situations without requiring a level sensor to detect dry running.

The great advantage of these relays is that, by using the motor itself as a sensor and without requiring any external detectors, they monitor the cos  $\phi$  of the motor and stop it before a breakdown caused by dry running, cavitation or closed valve occurs.

PS-11-R  
PS-15-24  
PS-16-R  
PF-16-R  
PF-47-R  
OD-PF




PUMP PROTECTION RELAY, 1PHASE, 0.37-1.5kW, 1NC 5A@250VAC  
OPEN FRAME P/S 15W, 24VDC  
PUMP PROTECTION RELAY, 1 PHASE, 0.37- 2.2KW, 1NC 5A@250VAC  
PUMP PROTECTION RELAY, 3PHASE 400VAC, 1.5-7.5kW, 1NC+1NO 5A@250VAC  
PUMP PROTECTION RELAY, 3PHASE 400VAC, 7.5-18.5kW, 1NC+1NO 5A@250VAC  
EXTERNAL DISPLAY MODULE FOR PF16R-PF47R RELAYS

\$ 244.60  
\$ 46.40  
\$ 429.70  
\$ 594.90  
\$ 661.00  
\$ 99.20

## Phase Monitoring Relays

### Finder Phase Control Relays


A full range of DIN rail mounting single and three-phase voltage control relays for accurate monitoring and control of under and/or (make contact opens if the relay detects an error)

70.31-400		VOLTAGE RELAY 3P3W OR 3P4W SPDT/6A 380-415V	\$	251.20
70.41-400		VOLTAGE RELAY MULTIFUNCTION 3P4W DPDT/6A 380-415V	\$	363.60
70.42-400		CURRENT MONITORING RELAY 0.5-16A 1CO/10A 230V	\$	299.70
70.51-230-2032		PHASE ROTATION, LOSS OF PH RELAY 208-480VAC SPDT	\$	158.60
70.61-400		PHASE ROTATION, LOSS OF PH RELAY 208-480VAC DPDT 22.5mm	\$	198.30
70.62-400				

70.61

### Crouzet Phase Control Relays


A full range of DIN rail mounted 3-phase phase control relays monitoring their own supply (self powered). M series are 17.5mm wide; H series are 35mm wide, and all units are multivoltage input

HWUA		MULTIFUNCTION PHASE CONTROL RELAY, 208-480V	\$	451.60
MWA		PHASE SEQUENCE, FAIL AND ASSYMMETRY RELAY, 1CO 8A@250VAC, 208-480VAC	\$	330.00
MWS		PHASE CONTROL RELAY, 1CO 8A@250VAC, 3 PHASE 208/480VAC	\$	175.90
MWS2		PHASE CONTROL RELAY, 2CO 8A@250VAC, 3 PHASE 208/440VAC	\$	248.80
MWU		PHASE SEQUENCE, FAIL, UNDERVOLTAGE RELAY, 1CO 8A@250VAC, 3 PH 208-480VAC	\$	330.00
MWUA		PHASE SEQUENCE, FAIL, ASSYMMETRY, UNDER-OVER VOLTS, 1CO 8A@250VAC, 3 PH 208-480VAC	\$	341.10

MWA/MWU


### Comadan RP30 Series Phase Asymmetry Relays (Plug-in)

3-Phase monitoring relays, monitoring correct phase sequence/asymmetry and/or phase failure, monitors its own supply, 11-pin plug-in

RP31-110V		3 PHASE SEQUENCE AND ASSYMMETRY RELAY, 11 PIN, 1CO 8A@250VAC, 110VAC	\$	264.40
RP31-400V		3 PHASE SEQUENCE AND ASSYMMETRY RELAY, 11 PIN, 1CO 8A@250VAC, 400VAC	\$	264.40
RP31-415V		3 PHASE SEQUENCE AND ASSYMMETRY RELAY, 11 PIN, 1CO 8A@250VAC, 415VAC	\$	264.40
RP32.1-1-3-110V		3-PHASE SEQ AND PHASE FAIL 110VAC SPDT	\$	290.80
RP32.1-2-3-110V		3-PHASE SEQ AND PHASE FAIL 110V DPDT	\$	290.80
RP32.1-110V		THREE PHASE SEQUENCE AND PHASE FAIL RELAY, 11 PIN, 1CO 8A@250VAC, 110VAC	\$	290.80
RP32.1-220V		THREE PHASE SEQUENCE AND PHASE FAIL RELAY, 11 PIN, 1CO 8A@250VAC, 230VAC	\$	290.80
RP32-400V		3 PHASE SEQUENCE AND PHASE FAIL RELAY, 11 PIN, 1CO 8A@250VAC, 400VAC	\$	237.90
RP32-415V		3 PHASE SEQUENCE AND PHASE FAIL RELAY, 11 PIN, 1CO 8A@250VAC, 415VAC	\$	237.90
RP32T-400V		3 PHASE FAIL RELAY, 3 SEC DELAY, 11 PIN, 1CO 8A@250VAC, 400VAC	\$	257.80
RP32T-415V	3 PHASE FAIL RELAY, 3 SEC DELAY, 11 PIN, 1CO 8A@250VAC, 415VAC	\$	297.70	


### Comadan FP30 Series Phase Monitoring Relays (DIN Rail mount)

3-phase monitoring relays, adjustable set point, ON and OFF delay, 1s fixed

FP30-110-30-31		3 PHASE UNDER/OVER VOLTAGE RELAY, DIN MOUNT, 1CO 8A@250VAC, 110VAC	\$	343.70
FP30-110-40-22		3 PHASE UNDER/OVER VOLTAGE RELAY, 11 PIN, 1CO 8A@250VAC, 110VAC	\$	343.70
FP30-110V		3 PHASE UNDER/OVER VOLTAGE RELAY, DIN RAIL, 1CO 8A@250VAC, 110VAC	\$	343.70
FP30-400V		3 PHASE UNDER/OVER VOLTAGE RELAY, DIN RAIL, 1CO 8A@250VAC, 400VAC	\$	343.70
FP31-110V		3 PHASE SEQUENCE AND ASSYMMETRY RELAY, DIN RAIL, 1CO 8A@250VAC, 110VAC	\$	343.70
FP31-400V		3 PHASE SEQUENCE AND ASSYMMETRY RELAY, DIN RAIL, 1CO 8A@250VAC, 400VAC	\$	343.70
FP31-415V		3 PHASE SEQUENCE AND ASSYMMETRY RELAY, DIN RAIL, 1CO 8A@250VAC, 415VAC	\$	343.70
FP34-110-99-33		3 PHASE SEQUENCE U/O VOLTAGE AND ASSYMMETRY RELAY, DIN RAIL, CUSTOM SPEC, 110VAC	\$	343.70
FP34-110V		3 PHASE SEQUENCE U/O VOLTAGE AND ASSYMMETRY RELAY, DIN RAIL, 1CO 8A@250VAC, 110VAC	\$	343.70
FP34-400-40-44		3 PHASE SEQUENCE U/O VOLTAGE AND ASSYMMETRY RELAY, DIN RAIL, 1CO 8A@250VAC, 400VAC	\$	343.70
FP34-400V		3 PHASE SEQUENCE U/O VOLTAGE AND ASSYMMETRY RELAY, DIN RAIL, 1CO 8A@250VAC, 400VAC	\$	343.70
FP34-415V		3 PHASE SEQUENCE U/O VOLTAGE AND ASSYMMETRY RELAY, DIN RAIL, 1CO 8A@250VAC, 415VAC	\$	343.70

### Comadan RP81 Load Guard Relay


Load guard for 3-phase motors, measures power factor / phase angle, current 0.5A to 6A (>6A with external CT). Adjustable phase angle  $\cos \phi$  0 to 0.9, adjustable time delay 0 to 20 seconds, 1-pole relay output 8A/250Vac

RP81-400V		LOAD GUARD FOR 3-PHASE MOTORS, COS PHI, 11 PIN, 1 CO 8A@250VAC, 400VAC	\$	359.60
ZB11		RELAY BASE, 11 PIN, DIN RAIL MOUNT, 400VAC RATED	\$	21.10

### Comadan RP91 Power Guard Relay

Power monitoring for single and 3-phase motors, monitors current up to 6A direct connect or CT output.


Adjustable time delay at motor start and motor overload. Power metering  $V \times I \times \cos \phi$ , metering output, 0-1mA indicates power consumption. 1-pole relay output 8A/250Vac

RP91-1-3-400-24		LOAD GUARD 1 AND 3 PHASE MOTORS, START+TRIP DELAY, 11PIN, 1 CO 8A@250VAC, 400VAC	\$	687.40
RP91-400V		LOAD GUARD 1 AND 3 PHASE MOTORS, START+TRIP DELAY, 11PIN, 1 CO 8A@250VAC, 400VAC	\$	687.40
RP91-415V		LOAD GUARD 1 AND 3 PHASE MOTORS, START+TRIP DELAY, 11PIN, 1 CO 8A@250VAC, 415VAC	\$	687.40
ZB11		RELAY BASE, 11 PIN, DIN RAIL MOUNT, 400VAC RATED	\$	21.10



## Liquid Level Relays & Float Switches

### CEL Conductive Liquid Level Control Relays

The R-LVL level controller for conductive liquids provides monitoring of up to 4 different levels, enabling two pump fill and empty operations to be controlled by one unit. An optional third relay can provide alarm condition signalling in two pump fill and empty applications. built-in logic to recognise fault conditions on the level sensor inputs, and four sensitivity settings to cover applications from salt water to clean water. Standard model is 230Vac supply, but options include 24Vac & 110Vac. DIN rail mounted.


R-LVL-230V		LEVEL CONTROL RELAY, DIN RAIL, UP TO 4 LEVELS, 3 CO 10A@250VAC, 230VAC	\$ 339.30
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### Finder Conductive Liquid Level Control Relays & Accessories

72.01-024-AC		LEVEL CONTROL RELAY, UP/DOWN, 1CO16A@250VAC, 24VAC	\$ 158.60
72.01-024-DC		LEVEL CONTROL RELAY, UP/DOWN, 1CO16A@250VAC, 24VDC	\$ 158.60
72.01-240-AC		LEVEL CONTROL RELAY, UP/DOWN, 1CO16A@250VAC, 230VAC	\$ 158.60
072.11		FLOOR WATER SENSOR FOR 72 SERIES RELAYS	\$ 52.90
072.50.0		STAINLESS STEEL CONDUCTIVE PROBE 500mm L 4mm DIA	\$ 25.20
072.50.1		STAINLESS STEEL ELECTRODE CONNECTOR 4mm	\$ 15.20
072.50.3		3-POLE PROBE SEPARATOR FOR 072.53 RODS	\$ 5.90
072.51		ELECTRODE HOLDER WITH 2-POLE CONNECTOR	\$ 112.00
072.53		ELECTRODE HOLDER WITH 3-POLE CONNECTOR	\$ 191.70
072.01.06		ELECTRODE FOR CONDUCTIVE LIQUIDS, 6M CABLE	\$ 58.40
072.01.15		ELECTRODE FOR CONDUCTIVE LIQUIDS, 15M CABLE	\$ 71.30
72.42-024		PRIORITY CHANGE RELAY, 2NO12A@250VAC, 24VAC/DC	\$ 214.80
72.42-230		PRIORITY CHANGE RELAY, 2NO12A@250VAC, 110-240VAC/DC	\$ 214.80

### Conductive Liquid Level Control Relays

For use with Pt100 sensors, built-in cable resistance compensation, -50°C to + 200°C in 4 switch selectable ranges, adjustable set point and reaction time delay


ENR-230		LEVEL CONTROL RELAY, 2 LEVEL, CONDUCTIVE PROBE INPUT, 24-230VAC/DC	\$ 252.00
ENRM-230		LEVEL CONTROL RELAY, 2 LEVEL WITH TIMER, CONDUCTIVE PROBE INPUT, 24-230VAC/DC	\$ 384.70
HNM		LEVEL CONTROL RELAY, CONDUCTIVE PROBE INPUT, 24-240VAC/DC	\$ 294.60
RL10-220V		LEVEL CONTROL RELAY, 11 PIN, CONDUCTIVE PROBE INPUT, 1CO 8A@250VAC, 230VAC	\$ 296.10
RL10-24DC-1P		LEVEL CONTROL RELAY, 11 PIN, CONDUCTIVE PROBE INPUT, 1CO 8A@250VAC, 24VDC	\$ 329.20
RL10-24VAC		LEVEL CONTROL RELAY, 11 PIN, CONDUCTIVE PROBE INPUT, 2CO 5A@250VAC, 24VAC	\$ 329.20
RL10-24VDC		LEVEL CONTROL RELAY, 11 PIN, CONDUCTIVE PROBE INPUT, 2CO 5A@250VAC, 24VDC	\$ 329.20
RL10-NON-STK		LEVEL CONTROL RELAY, 11 PIN, CONDUCTIVE PROBE INPUT, 1CO 8A@250VAC, NON STANDARD	\$ 329.20
S8-PROBE		3-PROBE HOLDER c/w 1M PROBES	\$ 199.00

### Float Switches

Twin-chambered float switches for plumbing pumps and grey water systems, complete with 300gr counterweight, maximum depth 40 metres, 10A resistive load (8A inductive load)/250Vac;6A/30Vdc switching, IP68


72.A1-NEO-10M		FLOAT SWITCH, 2 CHAMBER, 1CO 20A@250VAC, 10M NEOPRENE CABLE (72.A1.0.000.1001)	\$ 168.20
72.A1-NEO-5M		FLOAT SWITCH, 2 CHAMBER, 1CO 20A@250VAC, 5M NEOPRENE CABLE (72.A1.0.000.0501)	\$ 116.60
72.A1-PVC-10M		FLOAT SWITCH, 2 CHAMBER, 1CO 20A@250VAC, 10M PVC CABLE (72.A1.0.000.1000)	\$ 116.60
72.A1-PVC-5M		FLOAT SWITCH, 2 CHAMBER, 1CO 20A@250VAC, 5M PVC CABLE (72.A1.0.000.0500)	\$ 83.40
72.WEIGHT		COUNTERWEIGHT SET FOR 72.A1 FLOAT SWITCH	\$ 10.50

Triple-chambered float switch for dirty water systems, drainage plants and pumping stations, maximum depth 20 metres, complete with fixing kit 10A resistive load (8A inductive load)/250Vac;6A/30Vdc switching, IP68

72.B1-NEO-10M		FLOAT SWITCH, 3 CHAMBER, 1CO 20A@250VAC, 10M NEOPRENE CABLE (72.B1.0.000.1001)	\$ 343.70
72.B1-NEO-20M		FLOAT SWITCH, 3 CHAMBER, 1CO 20A@250VAC, 20M NEOPRENE CABLE (72.B1.0.000.2001)	\$ 465.60
72.B1-PVC-10M		FLOAT SWITCH, 3 CHAMBER, 1CO 20A@250VAC, 10M PVC CABLE (72.B1.0.000.1000)	\$ 284.30

New space-saving Float switch for liquid level regulation type 72.C1.0.000.0201 with 4-wire cable for filling or emptying applications including domestic applications. With ON / OFF manual switch, Protective bellows, float unit (maximum/minimum level). Supplied with wall or pipe fixing bracket included. Emptying function and Filling function. Suitable for clean water application where the lack of space precludes the use of a normal float switch.

Features: 1 CO contact rated 10 A 250 V AC, Magnetic opening and closing contact. Cable length 2m

72.C1-0201		FLOAT SWITCH, COMPACT, ON/OFF SWITCH, 1CO10A@250VAC, 2M NEOPRENE CABLE	\$ 166.80
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## Photoelectric Sensors

### Water Detection Sensors

EZ11  
EZ11PN  
EXF71



EZ11 Sensor

PE SENSOR-WATER DETECTOR 5M 12/24VDC NPN  
PE SENSOR-WATER DETECTOR 5M 12/24VDC PNP  
LEAK DETECTION SENSOR 12/24VDC NPN



EXF71 Leak Detection Sensor

\$ 1,605.00  
\$ 1,605.00  
\$ 441.40

### Metal Sheet Double-Feed Detection Sensors

GD10  
GD20  
GD20-C10  
GD20-C20  
GDC1

DOUBLE SHEET DETECTOR USE GD-C1  
DOUBLE SHEET DETECTOR 70mm USE GD-C1  
DOUBLE SHEET DETECTOR c/w 10M CABLE (obsolete)  
DOUBLE SHEET DETECTOR c/w 20M CABLE (obsolete)  
CONTROLLER FOR GD SERIES 12/24VDC (obsolete)

\$ 447.60  
\$ 1,086.60  
\$ 1,796.90  
\$ 1,796.90  
\$ 4,056.70

### Colour Recognition Sensors – Three Colour LED

Fully teachable colour mark sensor with red, green and blue LED's, allows pre-determined colours to be detected as signal marks, 12-24Vdc, IP67

LX101  
LX101-P  
LX101-P-Z  
TL46-A-425  
TL46-W815  
TL46-WLF-815



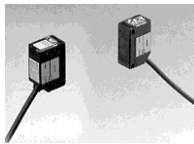
LX-101 Colour Mark Sensor

PE SENSOR, LASER COLOUR-MARK TYPE, 12-24VDC NPN, 2M CABLE  
PE SENSOR, LASER COLOUR-MARK TYPE, 12-24VDC PNP, 2M CABLE  
PE SENSOR, LASER COLOUR-MARK TYPE, 12-24VDC PNP, M12 CONNECTOR  
CONTRAST SENSOR, WHITE LED SPOT, 10-30Vdc., NPN OUTPUT, M12  
CONTRAST SENSOR, RGB LED SPOT, DELAY INPUT, 10-30Vdc NPN/PNP OUTPUT, M12  
CONTRAST SENSOR, RGB LED SPOT, REMOTE ACQUISITION, 10-30Vdc NPN/PNP OUTPUT, M12

\$ 882.90  
\$ 882.90  
\$ 882.90  
\$ 648.90  
\$ 648.90  
\$ 939.90

### Sub-miniature Sensors (12-24Vdc) – IP66

EX11A  
EX11B  
EX11EA  
EX11EB  
EX13A  
EX13A-PN  
EX13B  
EX13BPN  
EX13EA  
EX13EB  
EX13EBPN  
EX14A  
EX14A-PN  
EX14B



PE SENSOR-THRU-BEAM LIGHT-ON 150mm 12/24VDC NPN  
PE SENSOR-THRU-BEAM DARK-ON 150mm 12/24VDC NPN  
PE SENSOR-THRU-BEAM LIGHT-ON 150mm 12/24VDC NPN  
PE SENSOR-THRU-BEAM DARK-ON 150mm 12/24VDC NPN  
PE SENSOR-THRU-BEAM LIGHT-ON 500mm 12/24VDC NPN  
PE SENSOR-THRU-BEAM LIGHT-ON 500mm 12/24VDC PNP  
PE SENSOR-THRU-BEAM DARK-ON 500mm 12/24VDC NPN  
PE SENSOR-THRU-BEAM DARK-ON 500mm 12/24VDC PNP  
PE SENSOR-THRU-BEAM LIGHT-ON 500mm 12/24VDC NPN  
PE SENSOR-THRU-BEAM DARK-ON 500mm 12/24VDC NPN  
PE SENSOR-THRU-BEAM DARK-ON 500mm 12/24VDC PNP  
PE SENSOR-DIFFUSE LIGHT-ON 2-25mm 12/24VDC NPN  
PE SENSOR-DIFFUSE LIGHT-ON 2-25mm 12/24VDC PNP  
PE SENSOR-DIFFUSE DARK-ON 2-25mm 12/24VDC NPN

\$ 302.70  
\$ 302.70  
\$ 302.70  
\$ 302.70  
\$ 302.70  
\$ 302.70  
\$ 302.70  
\$ 302.70  
\$ 302.70  
\$ 302.70  
\$ 302.70  
\$ 278.40  
\$ 278.40  
\$ 278.40

### EX-30 Series Threaded Miniature Sensors

Amplifier Built-In, with sensitivity adjustment and high response speed, 12-24Vdc, IP67

EX31A  
EX31A-PN  
EX31B  
EX32A  
EX32B  
EX3D300E  
EX43

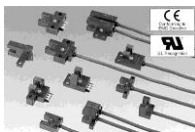


PE SENSOR-M4 MOUNT THRU-BEAM LIGHT-ON 12/24VDC NPN  
PE SENSOR-M4 MOUNT THRU-BEAM LIGHT-ON 12/24VDC PNP  
PE SENSOR-M4 MOUNT THRU-BEAM DARK-ON 12/24VDC NPN  
PE SENSOR-M6 MMOUNT DIFFUSE LIGHT-ON 12/24VDC NPN  
PE SENSOR-M6 MMOUNT DIFFUSE DARK-ON 12/24VDC NPN  
PE SENSOR-DIFFUSE SIDE SENSE 300mm 12/24VDC NPN  
PE SENSOR-DIFFUSE SPOT BEAM 20-35mm 12/24VDC NPN

\$ 403.10  
\$ 453.30  
\$ 403.10  
\$ 403.10  
\$ 403.10  
\$ 334.70  
\$ 365.10

### "U" Shaped Sensors (12-24Vdc)

PMK44  
PMK65



THRU-BEAM SLOT 5mm 5/24VDC LIGHT/DARK  
PE SENSOR, THRU-BEAM SLOT 6mm 5/24VDC, NPN NO

\$ 50.90  
\$ 50.90

### Sensor Controllers

NPSC7  
NPSC7W  
NPSC7

SENSOR CONTROLLER, EXTERNAL SYNC, 100/240VAC RELAY/NPN  
SENSOR CONTROLLER DUAL INPUT, 100/240VAC 2xRELAY/NPN  
SENSOR CONTROLLER EXTERNAL SYNC, WITH TIMER, 100/240VAC

\$ 196.00  
\$ 210.00  
\$ 240.00

### Signal Converters

EM901NP  
E-NPN-PNP-24V  
E-PNP-NPN-24V

CONVERTER, NPN-PNP  
SIGNAL CONVERTER, NPN TO PNP 24VDC  
SIGNAL CONVERTER, PNP TO NPN 24VDC


\$ 79.60  
\$ 79.60  
\$ 79.60



## Photoelectric Sensors

### General Purpose Sensors (24-240Vac/dc) – Terminal connection, IP66

Multivoltage photoelectric sensors with relay output (3A SPDT) complete with mounting brackets and reflector for retro-reflective type terminal connectors for wiring. Light-on or dark-on selectable by switch, adjustable sensitivity, IP66 protection. Timer models offer ON-delay, OFF-delay and ONE SHOT-delay options

BX15M-TFR		PE SENSOR, THRU-BEAM, 15M RANGE, 1 CO 3A@250VAC, 24-240VAC/DC	\$ 325.00
BX15M-TFR-T		PE SENSOR, THRU-BEAM WITH TIMER, 15M RANGE, 1CO 3A@250VAC, 24-240VAC/DC	\$ 357.80
BX5M-MFR		PE SENSOR, RETRO-REFLECTIVE, 5M RANGE, 1CO 3A@250VAC, 24-240VAC/DC	\$ 297.20
BX5M-MFR-T		PE SENSOR, RETRO-REFLECTIVE WITH TIMER, 5M RANGE, 1CO 3A@250VAC, 24-240VAC/DC	\$ 333.60
BX700-DFR		PE SENSOR, DIFFUSE-REFLECTIVE, 700mm RANGE, 1CO 3A@250VAC, 24-240VAC/DC	\$ 325.00
BX700-DFR-T		PE SENSOR, DIFFUSE-REFLECTIVE WITH TIMER, 700mm RANGE, 1CO 3A@250VAC, 24-240VAC	\$ 357.80

### General Purpose Sensors Pre-wired 2-metre cable


BEN5M-MDT	RETRO SENSOR, 0-5M LIGHT/DARK-ON PNP/NPN OUT 12-24VDC	\$ 266.80
BEN5M-MFR	RETRO SENSOR, 0-5M LIGHT/DARK-ON RELAY OUT 24-240V AC/DC	\$ 266.80

### General Purpose Sensors (12-240Vdc & 24-240Vac) – Pre-wired


IP69K, 10-30Vdc, Selectable Light-ON/Dark-ON, M12 connector or 2-Metre cable

NX5D700A		PE SENSOR, DIFFUSE ,700mm 12/240VDC/ 24-240VAC RELAY OUTPUT, LIGHT ON, 2M CABLE	\$ 302.70
NX5D700AC5		PE SENSOR, DIFFUSE ,700mm 12/240VDC/ 24-240VAC RELAY OUTPUT, LIGHT ON, 5M CABLE	\$ 334.70
NX5D700B		PE SENSOR, DIFFUSE ,700mm 12/240VDC/ 24-240VAC RELAY OUTPUT, DARK ON	\$ 302.70
NX5M10RA		PE SENSOR, THRU-BEAM 10M, 12/240VDC/ 24-240VAC, RELAY OUTPUT, LIGHT ON, 2M CABLE	\$ 342.30
NX5M10RB		PE SENSOR, THRU-BEAM 10M, 12/240VDC/ 24-240VAC, RELAY OUTPUT, DARK ON, 2M CABLE	\$ 342.30
NX5M30A		PE SENSOR, THRU-BEAM 30M, 12/240VDC/ 24-240VAC, RELAY OUTPUT, LIGHT ON, 2M CABLE	\$ 380.30
NX5M30B		PE SENSOR, THRU-BEAM 30M, 12/240VDC/ 24-240VAC, RELAY OUTPUT, DARK ON, 2M CABLE	\$ 380.30
NX5PRVM5A		PE SENSOR, RETRO-REFLEX, POLARISED 5M, 12/240VDC/ 24-240VAC, RELAY OUTPUT, L/ON	\$ 319.50
NX5PRVM5B		PE SENSOR, RETRO-REFLEX, POLARISED 5M, 12/240VDC/ 24-240VAC, RELAY OUTPUT, D/ON	\$ 319.50
NX5RM7A		PE SENSOR, RETRO-REFLEX 5M, 12/240VDC/ 24-240VAC, RELAY OUTPUT, LIGHT ON	\$ 342.30
NX5RM7B		PE SENSOR, RETRO-REFLEX 5M, 12/240VDC/ 24-240VAC, RELAY OUTPUT, DARK ON	\$ 342.30
RXM50		PE SENSOR, THRU-BEAM 50M, 12-24VDC NPN NO, 2M CABLE	\$ 611.20

### General Purpose Sensor Accessories



RXLS200P		PE SENSOR, DIFFUSE 50-200mm 12/24VDC PNP NO, 2M CABLE	\$ 434.60
RXLS200		DIFFUSE LTD DIST 50-200mm 12/24VDC NPN (obsolete)	\$ 434.60
OSRXL2		SLIT MASK FOR RX-LS200	\$ 22.90
EQ34		PE SENSOR - DIFFUSE, 0.2-2M RANGE, 12/24VDC, NPN OUTPUT, 2M CABLE	\$ 517.20
EQ34J		PE SENSOR - DIFFUSE, 0.2-2M RANGE, 12/24VDC, NPN OUTPUT, M12 PLUG-IN	\$ 562.80
EQ34J-CABLE-CEL		PE SENSOR - DIFFUSE 0.2-2m, 12/24VDC NPN WITH SHORT CABLE AND PLUG-CEL MANUFACTUR	\$ 562.80
EQ34PN		PE SENSOR - DIFFUSE, 0.2-2M RANGE, 12/24VDC, PNP OUTPUT, 2M CABLE	\$ 517.20
EQ34PNJ		PE SENSOR - DIFFUSE, 0.2-2M RANGE, 12/24VDC, PNP OUTPUT, M12 PLUG-IN	\$ 562.80
EQ34PNJ-CABLE-CEL		PE SENSOR - DIFFUSE, 0.2-2m 12/24VDC PNP WITH SHORT CABLE AND M12 MALE PLUG	\$ 562.80
EQ34W		PE SENSOR - DIFFUSE, 0.2-2M RANGE, 12/24VDC, 2xNPN OUTPUT, 2M CABLE	\$ 722.60

### General Purpose Sensor Accessories

EQ501		PE SENSOR- DIFFUSE 0.2-2.5M, 24-240VAC/DC, 2M CABLE	\$ 456.30
EQ501T		PE SENSOR- DIFFUSE WITH TIMER, 0.2-2.5M, 24-240VAC/DC, 2M CABLE	\$ 532.50
EQ511		PE SENSOR- DIFFUSE 0.2-2.5M, 24-240VAC/DC, 2M CABLE	\$ 456.30
EQ511T		PE SENSOR- DIFFUSE WITH TIMER, 0.2-2.5M, 24-240VAC/DC, 2M CABLE	\$ 532.50

## Photoelectric Sensors

### CX-400 Series Accessories

CABLE-M8-RA-3W-3M		SENSOR CABLE 3W M8 R/ANGLE 3M PVC	\$ 34.00
CABLE-M8-RA-3W-5M		SENSOR CABLE 3W M8 R/ANGLE 5M PVC	\$ 40.10
CABLE-M8-RA-4W-10M		SENSOR CABLE 4W M8 RT ANGLE 10M PVC	\$ 48.50
CABLE-M8-RA-4W-2M		SENSOR CABLE 4W M8 RT ANGLE 2M PUR	\$ 34.00
CABLE-M8-RA-4W-5M		SENSOR CABLE 4W M8 RT ANGLE 5M PUR	\$ 42.50
CABLE-M8-RA-4W-5MPVC		SENSOR CABLE 4W M8 RT ANGLE 5M PVC	\$ 42.50
CABLE-M8-S-3W-3M		SENSOR CABLE 3W M8 STRAIGHT 3M PVC	\$ 34.00
CABLE-M8-S-3W-5M		SENSOR CABLE 3W M8 STRAIGHT 5M PVC	\$ 40.10
CABLE-M8-S-4W-10M		SENSOR CABLE 4W M8 STRAIGHT 10M PVC	\$ 48.50
CABLE-M8-S-4W-2M		SENSOR CABLE 4W M8 STRAIGHT 2M PUR	\$ 34.00
CABLE-M8-S-4W-5M		SENSOR CABLE 4W M8 STRAIGHT 5M PUR	\$ 42.50
MSCX1		MOUNTING BRACKET FOR CX SERIES	\$ 17.60
MSCX-11		AXIS ADJ MOUNT BRKT FOR CX400 SERIES	\$ 69.30
MSCX2		MOUNTING BRACKET FOR CX SERIES	\$ 17.60
MSCX2-1		MOUNTING BRACKET FOR CX SERIES	\$ 17.60
MSCX2-2		MOUNTING BRACKET FOR CX SERIES	\$ 18.40
MSCX2-4		MOUNTING BRACKET FOR CX SERIES	\$ 28.90
MSCX2-5		MOUNTING BRACKET FOR CX SERIES	\$ 17.60
MSCX3		MOUNTING BRACKET FOR CX SERIES	\$ 17.60
MSCX4			
OSCX-05		SLIT MASK 0.5X6mm FOR CX SENSORS	\$ 13.10
OSCX-05X6		SLIT MASK 1mm DIA FOR CX411/CX412	\$ 13.10
OSCX1		SLIT MASK 1x6mm FOR CX400 SERIES	\$ 13.10
OSCX1-1X6		SLIT MASK 2mm DIA FOR CX-411	\$ 13.10
OSCX2		SLIT MASK 2x6mm FOR CX400 SERIES	\$ 13.10
OSCX2-2X6			
RF11		REFLECTOR 30x8mm ADHESIVE BACKED	\$ 22.90
RF113		REFLECTOR 36mm DIA	\$ 30.40
RF12		REFLECTOR 30x25mm ADHESIVE BACKED	\$ 38.00
RF20-230VAC		FREQUENCY RELAY, 50 OR 60HZ, ADJUSTABLE 1-10HZ, SELECTABLE TIME DELAY	\$ 367.50
RF210		REFLECTOR 33x13mm	\$ 38.00
RF220		REFLECTOR 35x35mm	\$ 30.40
RF230		REFLECTOR 50x50mm	\$ 30.40
RF330		LASER SENSOR REFLECTOR	\$ 65.50
RF410		REFLECTOR 45x29mm	\$ 30.40

## Cylindrical Photoelectric Sensors

### CY-100 Series M18 Threaded Cylindrical Sensors (12-24Vdc) – IP67

Short-bodied, low-cost sensors, 100mA/24Vdc max transistor output

CY111A	PE SENSOR - THRU-BEAM M18/15M,12-24VDC NPN L/LIGHT ON, 2M CABLE	\$ 120.10
CY111A-P	PE SENSOR - THRU-BEAM M18/15M, 12-24VDC PNP L/LIGHT ON, 2M CABLE	\$ 120.10
CY111B	PE SENSOR - THRU-BEAM M18/15M, 12-24VDC NPN DARK ON, 2M CABLE	\$ 120.10
CY111B-P	PE SENSOR - THRU-BEAM M18/15M,12-24VDC PNP DARK ON, 2M CABLE	\$ 120.10
CY111VB-Z	PE SENSOR - THRU-BEAM M18/15M, RT ANGLE, 12-24VDC NPN, DARK ON, M12 CONNECTOR	\$ 137.10
CY111A	PE SENSOR - THRU-BEAM M18/12M, 24/240VAC LIGHT ON, 2M CABLE	\$ 258.60
CY121A	PE SENSOR - DIFFUSE M18/100mm , 12-240VDC NPN LIGHT ON, 2M CABLE	\$ 91.00
CY121A-P	PE SENSOR - DIFFUSE M18/100mm , 12-24VDC PNP LIGHT ON, 2M CABLE	\$ 91.00
CY121B	PE SENSOR - DIFFUSE M18/100mm, 12-24VDC NPN DARK ON, 2M CABLE	\$ 91.00
CY121B-P	PE SENSOR - DIFFUSE M18/100mm, 12-24VDC PNP DARK ON, 2M CABLE	\$ 91.00
CY122A	PE SENSOR - DIFFUSE M18/600mm,12-24VDC NPN LIGHT ON, 2M CABLE	\$ 91.00
CY122A-P	PE SENSOR - DIFFUSE M18/600mm ,12-24VDC PNP LIGHT ON, 2M CABLE	\$ 91.00
CY122B	PE SENSOR - DIFFUSE M18/600mm ,12-24VDC NPN DARK ON, 2M CABLE	\$ 91.00
CY122B-P	PE SENSOR - DIFFUSE M18/600mm ,12-24VDC PNP DARK ON, 2M CABLE	\$ 91.00
CY122VB-P	PE SENSOR - DIFFUSE, RT ANGLE M18/600mm ,12-24VDC PNP DARK ON, 2M CABLE	\$ 145.50
CY192A-P-Y	PE SENSOR - RETRO M18/4M,12-24VDC PNP LIGHT ON, 2M CABLE	\$ 91.00
CY192A-Y	PE SENSOR - RETRO M18/4M,12-24VDCNPN LIGHT ON, 2M CABLE	\$ 91.00
CY192B-P-Y	PE SENSOR - RETRO M18/4M,12-24VDC PNP DARK ON, 2M CABLE	\$ 91.00
CY192B-Y	PE SENSOR - RETRO M18/4M,12-24VDC NPN DARK ON, 2M CABLE	\$ 91.00
CY19B	PE SENSOR - RETRO M18/1.5M, 24-240VAC DARK ON, 2M CABLE	\$ 197.70



### Datalogic S5 Series M18 Threaded Cylindrical Sensors – IP67 Protected, 15-264Vac, 2 Metre cable

S5-1-A2-10	PE SENSOR - M18 RETROREFLEX DARK-ON, 4M RANGE, 3W 15-265VAC	\$ 127.40
S5-1-A2-20	RETROREFLECTIVE SENSOR LIGHT-ON 18mm dia 4M range 15-265VAC (obsolete)	\$ 127.40
S5-1-C30-10	PE SENSOR - M18 DIFFUSE DARK-ON, 300mm RANGE, 3W 15-265VAC	\$ 168.60
S5-1-C30-20	DIFFUSE SENSOR LIGHT-ON M18/300mm 15-264VAC(obsolete)	\$ 168.60
S5-1-F8-10	THRU-BEAM RECEIVER DARK-ON 18mm/8M 15-265VAC (obsolete)	\$ 127.40
S5-1-F8-20	THRU-BEAM RECEIVER LIGHT-ON18mm/8M 15-265VAC (obsolete)	\$ 127.40
S5-1-G8-00	THRU-BEAM EMITTER18mm/8M 15-265VAC (obsolete)	\$ 103.10
R4-REFLECTOR	R4 PRISMATIC REFLECTOR 51x51mm	\$ 19.40



### S15 Series M18 Short-Bodied Threaded Cylindrical Sensors

IP69K, 10-30Vdc, Selectable Light-ON/Dark-ON, M12 connector or 2-Metre cable

S15-PA-2-A00-NK	PE SENSOR - M18 RETRO-REFLEX, IP69K, 4M NPN NO+NC, 12-30VDC, M12 CONN	\$ 190.10
S15-PA-2-A00-PK	PE SENSOR - M18 RETRO-REFLEX, IP69K, 4M PNP NO+NC, 12-30VDC, M12 CONN	\$ 190.10
S15-PA-2-C00-PK	PE SENSOR - M18 DIFFUSE, IP69K, 0-100mm, PNP NO+NC, 12-30VDC, M12 CONN	\$ 203.70
S15-PA-2-C10-PK	M18 IP69K PA DIFFUSE 0-350mm PNP NO/NC	\$ 190.10
S15-PA-2-F00-PK	PE SENSOR - M18 RECEIVER, IP69K, PNP NO+NC, 12-30VDC, M12 CONN	\$ 217.40
S15-PA-2-G00-XG	PE SENSOR - M18 EMITTER, IP69K, 12-30VDC, M12 CONN	\$ 217.40
S15-PA-3-C00-PK	PE SENSOR - M18 DIFFUSE, IP69K, 0-100mm,PNP NO, 12-30VDC, M12 PIGTAIL	\$ 190.10
S15-PA-5-B01-PK	PE SENSOR - M18 RETRO-POLARISED, 4M, PNP NO+NC, 12-30VDC, M12 CONN	\$ 190.10
S15-PA-5-C31-PK	PE SENSOR - M18 DIFFUSE, IP69K,1M, PNP NO+NC, 12-30VDC, M12 CONN	\$ 190.10
S15-PA-5-M01-PK	M18 PLASTIC BACK GROUND SUPPRESSION PNP M12	\$ 190.10
S15-NA-5-B01-PK	PE SENSOR - M18 IP69K S/S RETRO-POLARISED, PNP NO+NC, 10-30VDC, M12 CONN	\$ 335.50
S15-NA-5-C11-PK	PE SENSOR - M18 DIFFUSE L/ON, IP69K S/S, 350mm, PNP NO+NC, 10-30VDC, M12 CONN	\$ 305.60
S15-NA-5-C31-PK	M18 IP69K S/S DIFFUSE 1M PNP L/ON	\$ 380.30
S15-NA-5-F01-NK	M18 IP69K S/S THRU BEAM RECEIVER NPN	\$ 292.00
S15-NA-5-F01-PK	M18 IP69K S/S THRU BEAM RECEIVER PNP	\$ 292.00
S15-NA-5-G01-XG	PE SENSOR - M18 THRU-BEAM EMMITTER, IP69K S/S, 20M, M12 CONN	\$ 285.30
S15-NA-5-M01-PK	PE SENSOR - M18 DIFFUSE, BGS, IP69K S/S, 40-120mm, PNP NO+NC,12-30VDC, M12 CONN	\$ 335.50
R5-REFLECTOR	75mm DIA PRISMATIC REFLECTOR	\$ 38.80
R6-REFLECTOR	R6 PLASTIC REFLECTOR 60x40.5mm	\$ 38.80





## Datalogic - Inductive Proximity Sensors

### Standard Cylindrical Sensors, 3 Wire 10-30Vdc - IP67 - cable

Built-in LED status indication and short-circuit protection, 2 metre PVC cable

IS-08-A1-03	INDUCTIVE SENSOR, M8/1.5mm, SHIELDED, 10-30VDC, PNP NO, 2M CABLE	\$ 148.00
IS-08-A1-S1	INDUCTIVE SENSOR, M8/1.5mm, SHIELDED, 10-30VDC, PNP NO, M8 CONNECTOR	\$ 148.00
IS-08-A1-S2	INDUCTIVE SENSOR, M8/1.5mm, SHIELDED, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 148.00
IS-08-A2-03	INDUCTIVE SENSOR, M8/1.5mm, SHIELDED, 10-30VDC, PNP NC, 2M CABLE	\$ 148.00
IS-08-A3-03	INDUCTIVE SENSOR, M8/1.5mm, SHIELDED, 10-30VDC, NPN NO, 2M CABLE	\$ 148.00
IS-08-A4-03	INDUCTIVE SENSOR, M8/1.5mm, SHIELDED, 10-30VDC, NPN NC, 2M CABLE	\$ 148.00
IS-08-B1-S1	INDUCTIVE SENSOR, M8/1.5mm, SHIELDED, 10-30VDC, PNP NO, M8 CONNECTOR	\$ 148.00
IS-08-C1-03	INDUCTIVE SENSOR, M8/2mm, UNSHIELDED, 10-30VDC, PNP NO, 2M CABLE	\$ 148.00
IS-08-C2-03	INDUCTIVE SENSOR, M8/2mm, UNSHIELDED, 10-30VDC, PNP NC, 2M CABLE	\$ 148.00
IS-08-C3-03	INDUCTIVE SENSOR, M8/2mm, UNSHIELDED, 10-30VDC, NPN NO, 2M CABLE	\$ 148.00
IS-08-C4-03	INDUCTIVE SENSOR, M8/2mm, UNSHIELDED, 10-30VDC, NPN NC, 2M CABLE	\$ 148.00
IS-12-A1-03	INDUCTIVE SENSOR, M12/2mm, SHIELDED, 10-30VDC, PNP NO, 2M CABLE	\$ 127.40
IS-12-A15-03	INDUCTIVE SENSOR, M12/2mm, SHIELDED, 24-230VAC, 2 WIRE NO, 2M CABLE	\$ 139.50
IS-12-A15-S2	INDUCTIVE SENSOR, M12/2mm, SHIELDED, 24-230VAC, 2 WIRE NO, M12 CONNECTOR	\$ 139.50
IS-12-A1-S2	INDUCTIVE SENSOR, M12/2mm, SHIELDED, 10-30VDC, PNP N/O, M12 CONNECTOR	\$ 134.40
IS-12-A3-03	INDUCTIVE SENSOR, M12/2mm, SHIELDED, 10-30VDC, NPN NO, 2M CABLE	\$ 127.40
IS-12-A3-S2	INDUCTIVE SENSOR, M12/2mm, SHIELDED, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 139.50
IS-12-A8-S2	INDUCTIVE SENSOR, M12/2mm, SHIELDED, 24-230VAC, 2 WIRE NC, M12 CONNECTOR	\$ 139.50
IS-12-C1-03	INDUCTIVE SENSOR, M12/4mm, UNSHIELDED, 10-30VDC, PNP NO, 2M CABLE	\$ 127.40
IS-12-C1-S2	INDUCTIVE SENSOR, M12/4mm, UNSHIELDED, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 134.40
IS-12-C2-03	INDUCTIVE SENSOR, M12/4mm, UNSHIELDED, 10-30VAC, PNP NC, 2M CABLE	\$ 127.40
IS-12-C3-03	INDUCTIVE SENSOR, M12/4mm, UNSHIELDED, 10-30VDC, NPN NO, 2M CABLE	\$ 127.40
IS-12-C3-S2	INDUCTIVE SENSOR, M12/4mm, UNSHIELDED, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 134.40
IS-12-C8-S2	INDUCTIVE SENSOR, M12/4mm, UNSHIELDED, 24-230VAC, 2 WIRE NC, M12 CONNECTOR	\$ 139.50
IS-12-G5-03	INDUCTIVE SENSOR, M12/4mm, SHIELDED, 10-30VDC, PNP NO+NC, 2M CABLE	\$ 148.00
IS-12-G5-S2	INDUCTIVE SENSOR, M12/4mm, SHIELDED, 10-30VAC, PNP NO+NC, M12 CONNECTOR	\$ 148.00
IS-12-G6-03	INDUCTIVE SENSOR, M12/4mm, SHIELDED, 10-30VDC, NPN NO+NC, 2M CABLE	\$ 148.00
IS-12-G6-S2	INDUCTIVE SENSOR, M12/4mm, SHIELDED, 10-30VDC, NPN NO+NC, M12 CONNECTOR	\$ 148.00
IS-12-H3-03	INDUCTIVE SENSOR, M12/8mm, UNSHIELDED, 10-30VDC, NPN NO, 2M CABLE	\$ 148.00
IS-12-H3-S2	INDUCTIVE SENSOR, M12/8mm, UNSHIELDED, 10-30VDC, NPN NO+NC, M12 CONNECTOR	\$ 148.00
IS-12-H5-03	INDUCTIVE SENSOR, M12/8mm, UNSHIELDED, 10-30VDC PNP NO+NC, 2M CABLE	\$ 148.00
IS-12-H5-S2	INDUCTIVE SENSOR, M12/8mm, UNSHIELDED, 10-30VDC PNP NO+NC, M12 CONNECTOR	\$ 148.00
IS-12-H6-03	INDUCTIVE SENSOR, M12/8mm, UNSHIELDED, 10-30VDC, NPN NO+NC, 2M CABLE	\$ 148.00
IS-18-A1-03	INDUCTIVE SENSOR, M18/5mm, SHIELDED, 10-30VDC, PNP NO, 2M CABLE	\$ 127.40
IS-18-A15-03	INDUCTIVE SENSOR, M18/5mm, SHIELDED, 24-230VAC, 2 WIRE NO, 2M CABLE	\$ 145.50
IS-18-A15-S2	INDUCTIVE SENSOR, M18/5mm, SHIELDED, 24-230VAC, 2 WIRE NO, M12 CONNECTOR	\$ 145.50
IS-18-A1-S2	INDUCTIVE SENSOR, M18/5mm, SHIELDED, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 127.40
IS-18-A3-03	INDUCTIVE SENSOR, M18/5mm, SHIELDED, 10-30VDC, NPN NO, 2M CABLE	\$ 127.40
IS-18-A3-S2	INDUCTIVE SENSOR, M18/5mm, SHIELDED, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 127.40
IS-18-C0-03	INDUCTIVE SENSOR, M18/8mm, UNSHIELDED, 10-30VDC, PNP/NPN NO+NC, 2M CABLE	\$ 157.70
IS-18-C1-03	obsolete UNSH PROX 18/8mm 10-30VDC PNP N/O 2M	\$ 127.40
IS-18-C1-S2	INDUCTIVE SENSOR, M18/8mm, UNSHIELDED, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 127.40
IS-18-C2-03	INDUCTIVE SENSOR, M18/8mm, UNSHIELDED, 10-30VDC, PNP NC, 2M CABLE	\$ 127.40
IS-18-C3-03	INDUCTIVE SENSOR, M18/8mm, UNSHIELDED, 10-30VDC, NPN NO, 2M CABLE	\$ 127.40
IS-18-C3-S2	INDUCTIVE SENSOR, M18/8mm, UNSHIELDED, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 127.40
IS-18-C4-03		

### Standard Cylindrical Sensors, 3 Wire 10-30Vdc - IP67- M12 conn

Built-in LED status indication and short-circuit protection, with M12 connector

IS-08-A1-S2	INDUCTIVE SENSOR, M8/1.5mm, SHIELDED, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 148.00
IS-12-A3-S2	INDUCTIVE SENSOR, M12/2mm, SHIELDED, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 139.50
IS-12-C1-S2	INDUCTIVE SENSOR, M12/4mm, UNSHIELDED, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 134.40
IS-12-C3-S2	INDUCTIVE SENSOR, M12/4mm, UNSHIELDED, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 134.40
IS-18-A1-S2	INDUCTIVE SENSOR, M18/5mm, SHIELDED, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 127.40
IS-18-A3-S2	INDUCTIVE SENSOR, M18/5mm, SHIELDED, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 127.40
IS-18-C1-S2	INDUCTIVE SENSOR, M18/8mm, UNSHIELDED, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 127.40
IS-18-C3-S2	INDUCTIVE SENSOR, M18/8mm, UNSHIELDED, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 127.40
IS-18-E1-S2	INDUCTIVE SENSOR, M18/8mm, SHIELDED, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 127.40

## Datalogic - Inductive Proximity Sensors

### Short-Bodied Sensors, 3 Wire 10-30Vdc – IP67 - M8-M12 conn

Double-distance short-bodied cylindrical sensors with built-in LED status indication and short-circuit protection, M8 and M12 plug-in connector

IS-08-B1-S1	INDUCTIVE SENSOR, M8/1.5mm, SHIELDED, 10-30VDC, PNP NO, M8 CONNECTOR	\$ 148.00
IS-12-G5-S2	INDUCTIVE SENSOR, M12/4mm, SHIELDED, 10-30VAC, PNP NO+NC, M12 CONNECTOR	\$ 148.00
IS-12-G6-S2	INDUCTIVE SENSOR, M12/4mm, SHIELDED, 10-30VDC, NPN NO+NC, M12 CONNECTOR	\$ 148.00
IS-12-H3-S2	INDUCTIVE SENSOR, M12/8mm, UNSHIELDED, 10-30VDC, NPN NO+NC, M12 CONNECTOR	\$ 148.00
IS-12-H5-S2	INDUCTIVE SENSOR, M12/8mm, UNSHIELDED, 10-30VDC PNP NO+NC, M12 CONNECTOR	\$ 148.00
IS-12-H6-S2	obsolete - no replacement SHORT PROX UN/SHLD M12/8mm NPN ANT M12	\$ 148.00
IS-18-G2-S2	INDUCTIVE SENSOR, M18/8mm, SHIELDED, 10-30VDC, PNP NC, M12 CONNECTOR	\$ 148.00
IS-18-G5-S2	INDUCTIVE SENSOR, M18/8mm, SHIELDED, 10-30VDC, PNP NO+NC, M12 CONNECTOR	\$ 148.00
IS-18-G6-S2	INDUCTIVE SENSOR, M18/8mm, SHIELDED, 10-30VDC, NPN NO+NC, M12 CONNECTOR	\$ 148.00
IS-18-H5-S2	INDUCTIVE SENSOR, M18/14mm, UNSHIELDED, 10-30VDC, PNP NO+NC, M12 CONNECTOR	\$ 148.00
IS-18-H6-S2	INDUCTIVE SENSOR, M18/14mm, UNSHIELDED, 10-30VDC, NPN NO+NC, M12 CONNECTOR	\$ 148.00
IS-30-G1-S2	obsolete IND PROX 30mm/15mm 10-30VDC PNP N/O /M12	\$ 157.70
IS-30-G2-S2	INDUCTIVE SENSOR, M30/15mm, SHIELDED, 10-30VDC PNP NC, M12 CONNECTOR	\$ 157.70
IS-30-G3-S2	INDUCTIVE SENSOR, M30/15mm, UNSHIELDED, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 157.70
IS-30-H1-S2	INDUCTIVE SENSOR, M30/20mm, UNSHIELDED, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 157.70
IS-30-H2-S2	INDUCTIVE SENSOR, M30/20mm, UNSHIELDED, 10-30VDC, PNP NC, M12 CONNECTOR	\$ 157.70
IS-30-H3-S2	INDUCTIVE SENSOR, M30/20mm, UNSHIELDED, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 157.70
IS-30-H4-S2	INDUCTIVE SENSOR, M30/20mm 10-30VDC NPN NC, M12	\$ 157.70

### Stainless Steel Sensors, 3 Wire 10-30Vdc – IP67

Stainless Steel A151316L FOOD/PHARMA grade cylindrical sensors with built-in LED status indication and short circuit protection, M12 plug-in connector

IS-12-O1-S2	INDUCTIVE SENSOR, M12/4mm, SHIELDED, S/S, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 157.70
IS-12-O3-S2	INDUCTIVE SENSOR, M12/4mm, SHIELDED, S/S, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 157.70
IS-12-P1-S2	INDUCTIVE SENSOR, M12/8mm, UNSHIELDED, S/S, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 157.70
IS-12-P3-S2	INDUCTIVE SENSOR, M12/8mm, S/S, UNSHIELDED 10-30VDC NPN NO, M12 CONNECTOR	\$ 157.70
IS-18-O1-S2	INDUCTIVE SENSOR, M18/8mm, SHIELDED, S/S, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 181.90
IS-18-O3-S2	INDUCTIVE SENSOR, M18/8mm, SHIELDED, S/S, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 181.90
IS-18-P1-S2	INDUCTIVE SENSOR, M18/14mm, SHIELDED, S/S, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 181.90
IS-18-P3-S2	INDUCTIVE SENSOR, M18/14mm, SHIELDED, S/S, 10-30VDC, NPN NO, M12 CONNECTOR	\$ 181.90
IS-30-O1-S2	INDUCTIVE SENSOR, M30/15mm, SHIELDED, S/S, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 212.30
IS-30-P1-S2	INDUCTIVE SENSOR, M30/20mm, UNSHIELDED, S/S, 10-30VDC, PNP NO, M12 CONNECTOR	\$ 212.30

### Cylindrical Sensors, 2 Wire 24-230Vac – IP67

Built-in LED status indication, 2 metre cable

IS-12-A8-S2	INDUCTIVE SENSOR, M12/2mm, SHIELDED, 24-230VAC, 2 WIRE NC, M12 CONNECTOR	\$ 139.50
IS-12-A15-03	INDUCTIVE SENSOR, M12/2mm, SHIELDED, 24-230VAC, 2 WIRE NO, 2M CABLE	\$ 139.50
IS-18-A15-03	INDUCTIVE SENSOR, M18/5mm, SHIELDED, 24-230VAC, 2 WIRE NO, 2M CABLE	\$ 145.50
IS-30-A15-03	INDUCTIVE SENSOR, M30/10mm, SHIELDED, 24-230VAC, 2 WIRE NO, 2M CABLE	\$ 163.80

Built-in LED status indication, M12 double-keywayed connector

IS-12-C8-S2	INDUCTIVE SENSOR, M12/4mm, UNSHIELDED, 24-230VAC, 2 WIRE NC, M12 CONNECTOR	\$ 139.50
IS-12-A15-S2	INDUCTIVE SENSOR, M12/2mm, SHIELDED, 24-230VAC, 2 WIRE NO, M12 CONNECTOR	\$ 139.50
IS-18-A15-S2	INDUCTIVE SENSOR, M18/5mm, SHIELDED, 24-230VAC, 2 WIRE NO, M12 CONNECTOR	\$ 145.50
IS-30-A15-S2	INDUCTIVE SENSOR, M30/10mm, SHIELDED, 24-230VAC, 2 WIRE NO, M12 CONNECTOR	\$ 163.80

CABLE-M12-S-3W-AC

DOUBLE KEY CABLE FOR AC SENSOR 3M

\$ 91.00

### Datalogic Block Type Inductive Sensors – IP67




40 x 40 x 120mm, terminal connect, built-in LED status indication

IS-40-Y5-S3	INDUCTIVE SENSOR, 40x40mm /30mm, UNSHIELDED, 10-30DC, PNP NO+NC, GLAND	\$ 150.40
IS-40-Y6-S3	40mm BLOCK SENSOR 30mm 10-30VDC NPN NO/NC	\$ 150.40
IS-40-W7-S3	INDUCTIVE SENSOR, 40x40mm /15mm, SHIELDED, 20-250VAC/DC, 2 WIRE NO, GLAND	\$ 155.20
IS-40-Y7-S3	INDUCTIVE SENSOR, 40x40mm /30mm, UNSHIELDED, 20-250VAC/DC, 2 WIRE NO, GLAND	\$ 155.20
IS-40-Y8-S3	IND PROX BLOCK TYPE 30mm Sn 20-250VAC NC	\$ 155.20


## Panasonic - Inductive Proximity Sensors

### Cylindrical Sensors, 3 Wire 10-30Vdc – IP68/IP69K


Built-in LED status indication and short-circuit protection, 2 metre cable

GX-M12A		INDUCTIVE SENSOR, M12/2mm, SHIELDED, 10-30VDC NPN NO, 2M CABLE	\$ 103.10
GX-M12A-P		INDUCTIVE SENSOR, M12/2mm, SHIELDED, 10-30VDC PNP NO, 2M CABLE	\$ 103.10
GX-M12B		INDUCTIVE SENSOR, M12/2mm, SHIELDED, 10-30VDC NPN NC, 2M CABLE	\$ 103.10
GX-M12B-P		INDUCTIVE SENSOR, M12/2mm, SHIELDED, 10-30VDC PNP NC, 2M CABLE	\$ 103.10
GX-M18A		INDUCTIVE SENSOR, M18/5mm, SHIELDED, 10-30VDC NPN NO, 2M CABLE	\$ 103.10
GX-M18A-P		INDUCTIVE SENSOR, M18/5mm, SHIELDED, 10-30VDC PNP NO, 2M CABLE	\$ 103.10
GX-M18B			
GX-M18B-P		INDUCTIVE SENSOR, M18/5mm, SHIELDED, 10-30VDC PNP NC, 2M CABLE	\$ 103.10
GX-M30A		INDUCTIVE SENSOR, M30/10mm, SHIELDED, 10-30VDC NPN NO, 2M CABLE	\$ 103.10
GX-M30A-P		INDUCTIVE SENSOR, M30/10mm, SHIELDED, 10-30VDC PNP NO, 2M CABLE	\$ 103.10
GX-M30B		INDUCTIVE SENSOR, M30/10mm, SHIELDED, 10-30VDC NPN NC, 2M CABLE	\$ 103.10
GX-M30B-P		INDUCTIVE SENSOR, M30/10mm, SHIELDED, 10-30VDC PNP NC, 2M CABLE	\$ 103.10
GX-MK12A		INDUCTIVE SENSOR, M12/7mm, UNSHIELDED, 10-30VDC NPN NO, 2M CABLE	\$ 109.10
GX-MK12A-P		INDUCTIVE SENSOR, M12/7mm, UNSHIELDED, 10-30VDC PNP NO, 2M CABLE	\$ 109.10
GX-MK12A-P-Z		INDUCTIVE SENSOR, M12/7mm, UNSHIELDED, 10-30VDC NPN NO, M12 CONNECTOR	\$ 109.10
GX-MK12B		INDUCTIVE SENSOR, M12/7mm, UNSHIELDED, 10-30VDC NPN NC, 2M CABLE	\$ 109.10
GX-MK12B-P		INDUCTIVE SENSOR, M12/7mm, UNSHIELDED, 10-30VDC PNP NC, 2M CABLE	\$ 109.10
GX-MK18A		INDUCTIVE SENSOR, M18/12mm, UNSHIELDED, 10-30VDC NPN NO, 2M CABLE	\$ 109.10
GX-MK18B		INDUCTIVE SENSOR, M18/12mm, UNSHIELDED, 10-30VDC NPN NO, 2M CABLE	\$ 109.10
GX-MK18B-P		INDUCTIVE SENSOR, M18/12mm, UNSHIELDED, 10-30VDC PNP NC, 2M CABLE	\$ 109.10
GX-MK30A		INDUCTIVE SENSOR, M30/22mm, UNSHIELDED, 10-30VDC NPN NO, 2M CABLE	\$ 109.10
GX-MK30B		INDUCTIVE SENSOR, M30/22mm, UNSHIELDED, 10-30VDC NPN NC, 2M CABLE	\$ 109.10
GX-MK30B-P		INDUCTIVE SENSOR, M30/22mm, UNSHIELDED, 10-30VDC PNP NC, 2M CABLE	\$ 109.10

### GX- M Series Cylindrical Sensors, 2 Wire, 12-24Vdc

GX-ML8A-U			
GX-ML12A-U		INDUCTIVE SENSOR, M12/4mm, UNSHIELDED, 10-30VDC 2 WIRE NO, 2M CABLE	\$ 97.00
GX-ML12B-U		INDUCTIVE SENSOR, M12/4mm, UNSHIELDED, 10-30VDC 2 WIRE NC, 2M CABLE	\$ 97.00
GX-ML18B-U		INDUCTIVE SENSOR, M18/7mm, UNSHIELDED, 10-30VDC 2 WIRE NC, 2M CABLE (OBSOLETE)	\$ 97.00
GX-ML30B-U			


### Flat Pack Style – 12-24VDC and 10-55Vdc

GXL8FUB		INDUCTIVE SENSOR, SIDE SENSING, 2.5mm 12/24VDC 2WIRE NC (obsolete)	\$ 105.00
GXL8HU		INDUCTIVE SENSOR, TOP SENSING, 2.5mm 12/24VDC 2WIRE NO (obsolete)	\$ 105.00
GXL8HUB		INDUCTIVE SENSOR, TOP SENSING, 2.5mm 12/24VDC 2WIRE NC (obsolete)	\$ 105.00
GXL8HUBC5		INDUCTIVE SENSOR, TOP SENSING, 2.5mm 12/24VDC 2WIRE NC, 5M CABLE (obsolete)	\$ 167.40
GXLN12F		IND PROX SW FRONT 3mm 12/24VDC NPN NO	\$ 105.00
GXLN12FP		IND PROX SW FRONT 3mm 12/24VDC PNP NO	\$ 105.00
GXLN12FT		IND PROX SW FRONT 3mm 12/24VDC NPN NO	\$ 105.00

### Capacitive Proximity Sensors

#### Autonics Capacitive Proximity Sensors

Low-cost shielded (flush) capacitive proximity sensors in polyamide (18mm) or nickel plated brass (30mm) housings, with LED indication, adjustable sensitivity, 2 metre PVC cable


CR18-8DN		CAPACITIVE SENSOR M18/8mm IP66 12-24VDC, NPN NO	\$ 122.60
CR18-8AC		CAPACITIVE SENSOR, M18/8mm IP66, 85-264VAC NC	\$ 142.80
CR18-8AO		CAPACITIVE SENSOR M18/8mm IP66 85-264VAC NO	\$ 142.80
CR18-8DN		CAPACITIVE SENSOR M18/8mm IP66 12-24VDC, NPN NO	\$ 122.60
CR18-8DP		CAPACITIVE SENSOR, M18/8mm IP66 12-24VDC, PNP NO	\$ 122.60
CR30-15AC		CAPACITIVE SENSOR, M30/15mm, 85-264VAC, NC	\$ 142.80
CR30-15AO		CAPACITIVE SENSOR, M30/15mm, 85-264VAC, NO	\$ 142.80
CR30-15DN		CAPACITIVE SENSOR M30/15mm, 12-24VDC, NPN NO	\$ 134.50
CR30-15DP		CAPACITIVE SENSOR, M30/15mm, 12-24VDC, PNP NO	\$ 134.50

#### Rechner Series 26 Capacitive Sensors, IP67

Capacitive proximity sensors constructed in PTFE with LED indication, designed for the food/pharma industries, to mount through silos/tanks, providing accurate level indication. Suitable for hazardous area applications. 10-30Vdc, PNP antivalent (N/O + N/C) output, adjustable sensitivity, 2 metre PVC cable

KAS80-26-A-PTFE		CAPACITIVE LEVEL PROBE 100c IP67 100mm	\$ 1,193.10
KAS80-26-A-PTFE-TRI		CAPACITIVE SENSOR TRI CLAMP MOUNT	\$ 1,420.70

A diverse range of Rechner Capacitive Sensors are available on request

EGI130		CONTROLLER FOR IAS/KAS 110/22VAC 1 CONTA	\$ 514.00
EGI130		CONTROLLER FOR IAS/KAS (2) 110/220VAC 2	\$ 674.50
EGI130-TD		CONTROLLER FOR IAS/KAS 110/220VAC 1CO	\$ 627.20

A wide variety of other sensors and controllers are available on request

## Inductive Proximity Sensors

### Rechner Namur and Ex Sensors – IP67 with IECEx approvals

Built-in LED status indication

NAMUR EN 60947-5-6, Ex ia IIC T1-T6 Ga, - 5-15Vdc

IAS-30-M8-N	INDUCTIVE SENSOR, M8/1mm, S/S, 7.7-10VDC, NAMUR OUTPUT, 2M CABLE, ATEX	\$ 329.90
IAS-30-A13-N	INDUCTIVE SENSOR, M18/5mm, 7.7-10VDC, NAMUR OUTPUT, 2M CABLE	\$ 248.70
IAS-30-A13-N-STEX	INDUCTIVE SENSOR, M18/5mm, 7.7-10VDC, NAMUR OUTPUT, 2M CABLE, ATEX	\$ 645.20
IAS-30-A13-N-Y5	INDUCTIVE SENSOR, M18/5mm, 7.7-10VDC, NAMUR OUTPUT, M12 CONNECTOR	\$ 460.80
IAS-30-A14-N-STEX	INDUCTIVE SENSOR, M30/10mm, 7.7-10VDC, NAMUR OUTPUT, 2M CABLE, STEX	\$ 855.80
IAS-30-A22-N-ATEX	INDUCTIVE SENSOR, M12/4mm, 7.7-10VDC, NAMUR OUTPUT, 2M CABLE, ATEX	\$ 444.70
IAS-30-A23-N-ATEX-5M	INDUCTIVE SENSOR, M18/8mm, 7.7-10VDC, NAMUR OUTPUT, 5M CABLE, ATEX	\$ 595.30
IAS-30-A24-N-ATEX	INDUCTIVE SENSOR, M30/15mm, 7.7-10VDC, NAMUR OUTPUT, 2M CABLE, ATEX	\$ 600.60

3 wire 10-30Vdc - for use in dust explosion zone 20 and gas zone 1 - Ex mb IIC T4 Gb, Ex ta/tb IIIC T101°C Da/Db

IAS-10-A12-S-STEX	INDUCTIVE SENSOR, M12/2mm, 10-30VDC, PNP NO, IECEX, 5M CABLE	\$ 818.70
IAS-10-A12-S-STEX-15	INDUCTIVE SENSOR, M12/2mm, 10-30VDC, PNP NO, IECEX, 15M CABLE	\$ 830.80
IAS-10-A13-A-STEX	INDUCTIVE SENSOR, M18/5mm, 10-30VDC, PNP NO+NC, IECEX, 5M CABLE	\$ 804.10
IAS-10-A13-A-STEX-10	INDUCTIVE SENSOR, M18/5mm, 10-30VDC, PNP NO+NC, IECEX, 10M CABLE (IA0210)	\$ 830.80
IAS-10-A14-A-STEX	INDUCTIVE SENSOR, M30/10mm, 10-30VDC, PNP NO+NC, IECEX, 5M CABLE (IA0183)	\$ 698.80
IAS-10-A14A-STEX-10M	INDUCTIVE SENSOR, M30/10mm, 10-30VDC, PNP NO+NC, IECEX, 10M CABLE	\$ 721.90

### Cables for Plug-in Sensors

CABLE-M8-S-3W-3M	SENSOR CABLE 3W M8 STRAIGHT 5M PVC	\$ 40.10
CABLE-M8-S-3W-5M	SENSOR CABLE 3W M8 STRAIGHT 5M PVC	\$ 40.10
CABLE-M8-RA-3W-3M	SENSOR CABLE 3W M8 R/ANGLE 3M PVC	\$ 34.00
CABLE-M8-RA-3W-5M	SENSOR CABLE 3W M8 R/ANGLE 5M PVC	\$ 40.10
CABLE-M8-S-4W-10M		
CABLE-M8-S-4W-2M	SENSOR CABLE 4W M8 STRAIGHT 2M PUR	
CABLE-M8-S-4W-5M	SENSOR CABLE 4W M8 STRAIGHT 5M PUR	
CABLE-M8-RA-4W-10M	SENSOR CABLE 4W M8 RT ANGLE 10M PVC	
CABLE-M8-RA-4W-2M	SENSOR CABLE 4W M8 RT ANGLE 2M PUR	\$ 34.00
CABLE-M8-RA-4W-5M	SENSOR CABLE 4W M8 RT ANGLE 5M PUR	\$ 42.50
CABLE-M8-RA-4W-5MPVC	SENSOR CABLE 4W M8 RT ANGLE 5M PVC	\$ 48.50
CABLE-M12-S-3W-10M	SENSOR CABLE 3W M12 STRAIGHT 10M PVC	\$ 42.50
CABLE-M12-S-3W-3M	SENSOR CABLE 3W M12 STRAIGHT 3M PVC	\$ 42.50
CABLE-M12-S-3W-5M	SENSOR CABLE 3W M12 STRAIGHT 5M PVC	\$ 42.50
CABLE-M12-RA-3W-3M	SENSOR CABLE 3W M12 RT ANGLE 3M PVC	\$ 34.00
CABLE-M12-S-4W-2M	SENSOR CABLE 4W M12 STRAIGHT 2M PUR	\$ 34.00
CABLE-M12-S-4W-5M	SENSOR CABLE 4W M12 STRAIGHT 5M PUR	\$ 42.50
CABLE-M12-S-4W-10M	SENSOR CABLE 4W M12 STRAIGHT 10M PVC	\$ 48.50
CABLE-M12-RA-4W-2M	SENSOR CABLE 4W M12 RT ANGLE 2M PUR	\$ 34.00
CABLE-M12-RA-4W-5M	SENSOR CABLE 4W M12 RT ANGLE 5M PUR	\$ 42.50
CABLE-M12-RA-4W-10M	SENSOR CABLE 4W M12 RT ANGLE 10M PVC	\$ 42.50
CABLE-M12-S-5W-2M	SENSOR CABLE 5W M12 STRAIGHT 2M PVC	\$ 34.00
CABLE-M12-S-5W-5M	SENSOR CABLE 5W M12 STRAIGHT 5M PVC	\$ 42.50
CABLE-M12-S-5W-10M	SENSOR CABLE 5W M12 STRAIGHT 10M PVC	\$ 72.80
CABLE-M12-RA-5W-2M	SENSOR CABLE 5W M12 RT ANGLE 2M PVC	\$ 34.00
CABLE-M12-RA-5W-5M	SENSOR CABLE 5W M12 RT ANGLE 5M PVC	\$ 42.50
CABLE-M12-RA-5W-10M	SENSOR CABLE 5W M12 RT ANGLE 10M PVC	\$ 72.80
CABLE-M12/M12-4W-1.5	EXTENSION CABLE M12/M12 4W 1.5M STR	\$ 89.70
CABLE-M12/M12-4W-3M	EXTENSION CABLE M12/M12 4W 3M STRAIGHT	\$ 101.90
CABLE-M12/M12-4W-5M	EXTENSION CABLE M12/M12 4W 5M STRAIGHT	\$ 135.80
M8PLUG-3P-STR/M	M8 3 POLE MALE STRAIGHT PLUG	\$ 32.80
M8PLUG-4P-STR/F	M8 4 POLE FEMALE STRAIGHT PLUG	\$ 51.30
M8PLUG-4P-STR/M	M8 4 POLE MALE STRAIGHT PLUG	\$ 57.10
M8PLUG-4P-STRAIGHT	M8 4 POLE STRAIGHT SENSOR PLUG	\$ 57.10
M12PLUG-4P-STR/M	M12 4 POLE MALE STRAIGHT PLUG	\$ 21.30
M12PLUG-4P-STR/F	M12 4 POLE FEMALE STRAIGHT PLUG	\$ 21.30
M12PLUG-4P-RA/M	M12 4 POLE MALE RIGHT ANGLE PLUG	\$ 21.30
M12PLUG-4P-RA/F	M12 4 POLE FEMALE RIGHT ANGLE PLUG	\$ 21.30
M12PLUG-5P-STR/M	M12 5 POLE MALE STRAIGHT PLUG PG9	\$ 27.70
M12PLUG-5P-STR/M	M12 5 POLE MALE STRAIGHT PLUG PG9	\$ 27.70
M12PLUG-8P-STR/M	M12 8POLE MALE STRAIGHT PLUG	\$ 71.60
M12PLUG-8P-STR/M	M12 8POLE MALE STRAIGHT PLUG	\$ 71.60
CABLE-M12-S-3W-AC	DOUBLE KEY CABLE FOR AC SENSOR 3M	\$ 91.00



### Sensor Mounts

Stainless steel, with recoil spring to protect sensors in the event of front-on collision

RECOIL-MOUNT-18	PROX SWITCH MOUNT, SPRING RETURN, 18mm DIA, S/S	\$ 183.40
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## Door & Gate Sensors, Pressure Sensors & Encoders

### Auto Door Sensor

Auto door sensor, 2.7 metre sensing distance, with 4-step variable front sensing area from 7.5 to 28.5 degrees, adjustable linear sensing area 28.5 degrees, adjustable linear sensing area, selectable output hold time from 2 to 15 sec, 1A relay output, 24-240Vac/dc

ADS-AF

DOOR SENSOR DIFFUSE 2M-2.7M 24-240VAC/DC

\$ 251.60



### Door Minder

"Plug & Play" auto door minder, 2.7 metre sensing distance, utilising the ADS-F sensor (above) pre-wired on 10M cable, with either a buzzer for entry notification or a counter for "people-counting applications, complete with 230Vac/24Vdc power pack

DM-01

DOOR MINDER, WITH SENSOR AND BUZZER

\$ 363.80

DM-02

DOOR MINDER, WITH SENSOR AND COUNTER

\$ 460.80

DM-01-EXT

EXTENSION SOUNDER, FOR DM-01 DOOR MINDER

\$ 72.20



### Panasonic Pressure Sensors

DP-100 Pressure Sensors -Compact 3-colour, 4 digit, dual-display, N/O or N/C selectable, 12/24Vdc operation

DP-101

PRESSURE SENSOR -100-+100kPa

\$ 230.90

DP-101A

PRESSURE SENSOR -100/+100kPa ANALOG OUT

\$ 278.50

DP-101-M-P

PRESSURE SENSOR -100-+100kPa PNP M5, NO LEAD

\$ 230.90

DP-102

PRESSURE SENSOR -100 TO + 1000kPa

\$ 230.90

DP-102A

PRESSURE SENSOR 1MPa ANALOG OUT

\$ 278.50

MSDP1-1

MOUNTING BRACKET FOR D100 SERIES

\$ 16.30

MSDP1-2

PANEL MOUNTING KIT FOR DP100 SERIES

\$ 20.30

MSDP1-3

FRONT PROTECTION COVER FOR DP100 SERIES

\$ 16.30

CN-14A-C2

CONNECTOR FOR PM 45/65 SERIES 2M CABLE

\$ 12.20



### Datalogic Programmable Rotary Encoders

Datalogic Programmable Rotary Encoders are programmable via USB from 1 to 16348 ppr. They are housed in a rugged 58mm dia x 48mm long IP65 rated aluminium case with either 6mm or 10mm solid stainless steel shaft With a broad input voltage range (5-30Vdc) and smart push-pull & line driver output, and a 1.5M cable, the IEP58 programmable encoders are suitable for PLCs and all electronic count/rate measurement applications

IEP58-S06-PROG-C15

ENCODER USB PROGRAMMABLE TO 16384PPR, 6mm SOLID SHAFT, 1.5m CABLE

\$ 576.30

IEP58-S10-PROG-C15

ENCODER USB PROGRAMMABLE TO 16384PPR, 10mm SOLID SHAFT, 1.5m CABLE

\$ 576.30

IEP58-S10-PROG-M12

ENCODER USB PROGRAMMABLE TO 16384PPR, 10mm SOLID SHAFT, M12 CONNECTION

\$ 576.30

IEP58-H15-PROG-C15

ENCODER USB PROGRAMMABLE TO 16384PPR 15mm HOLLOW SHAFT

\$ 576.30

IEP58-PROG-TOOL

IEP58 PROGRAMMING TOOL ENCODER-PC VIA USB

\$ 485.10

IEP58-ST58-BELL

IEP58 ENCODER MOUNTING BELL

\$ 136.90

IEP58-ST58-BRKT

IEP58 ENCODER MOUNTING L BRACKET

\$ 79.70

IEP58-ST58-FLNG

IEP58 ENCODER MOUNTING SQUARE FLANGE

\$ 73.90

IEP58-ST58-FLNG-6MM

IEP58 ENCODER MOUNTING SQUARE FLANGE FOR USE WITH 6MM SHAFT ENCODER

\$ 73.90

IEP58-ST58-KIT

ST58 KIT IEP 58 ENCODER FIXING CLAMPS (3 KITS)

\$ 27.60

IEP58-FAC06-06

FLEXIBLE ALUMINIUM COUPLING 6MM DIA

\$ 68.70

IEP58-FAC10-10

FLEXIBLE ALUMINIUM COUPLING 10MM DIA

\$ 68.70

IEP58-FBC06-06

FLEXIBLE PLASTIC COUPLING 6MM DIA

\$ 60.10

IEP58-FBC10-10

FLEXIBLE PLASTIC COUPLING 10MM DIA

\$ 60.10

RS15-06

IEP58 HOLLOW SHAFT ENCODER REDUCING SLEEVE15-6mm

\$ 38.10

RS15-08

IEP58 HOLLOW SHAFT ENCODER REDUCING SLEEVE15-8mm

\$ 38.10

RS15-10

IEP58 HOLLOW SHAFT ENCODER REDUCING SLEEVE15-10mm

\$ 25.40

RS15-11

IEP58 HOLLOW SHAFT ENCODER REDUCING SLEEVE15-11mm

\$ 42.70

RS15-12

IEP58 HOLLOW SHAFT ENCODER REDUCING SLEEVE15-12mm

\$ 27.70

RS15-3/8

IEP58 HOLLOW SHAFT ENCODER REDUCING SLEEVE15-3/8 INCH

\$ 42.70



A full range of encoders for industrial applications is available on request



## Reer Safety Light Curtains - EOS series


### Type 2, Cat 2 Safety Light Curtains

EOS2 is a compact range of Type 2, Cat.2 Safety Light Curtains from ReeR offering competitive performance and innovative features. Ideal for the protection of any process machine, particularly where space restrictions exist. The products comply to Safety Level Type 2 SIL1/SILCL1 and PL c standards. Includes models with integrated safety functions, including self monitoring of static outputs, EDM (External Device Monitoring) and selectable manual/auto restart. A full range of accessories including floor-mount stands, tube-mounted mirrors, and IP69K food-graded watertight enclosures are also available.

EOS2 1203A		SAFETY LIGHT CURTAIN, 1200mm H, 30mm RES, AUTO RESTART	\$2,971.80
EOS2 1205A		SAFETY LIGHT CURTAIN, 1200mm H, 50mm RES, AUTO RESTART	\$1,937.30
EOS2 1209A		SAFETY LIGHT CURTAIN, 1200mm H, 90mm RES, AUTO RESTART	\$1,937.30
EOS2 1209X		SAFETY LIGHT CURTAIN, 1200mm H, 90mm RES, AUTO/MANUAL RESTART	\$1,937.30
EOS2 1355A		SAFETY LIGHT CURTAIN, 1360mm H, 50mm RES, AUTO RESTART	\$2,358.50
EOS2 1509X		SAFETY LIGHT CURTAIN, 1500mm H, 90mm RES, MAN/AUTO RESTART	\$1,976.70
EOS2 1805A		SAFETY LIGHT CURTAIN, 1810mm H, 50mm RES, AUTO RESTART	\$2,705.00
EOS2 454A		SAFETY LIGHT CURTAIN, 450mm H, 40mm RES, AUTO RESTART	\$1,781.00

### Type 4, Cat 4 Safety Light Curtains

The compact EOS4 range of Type 4, Cat.4 Safety Light Curtains from ReeR offer small housing size and minimum dead zone, ideal for the protection of any process particularly where space restrictions exist. The products comply to Safety Level Type 4, SIL3/SILCL3 and PL e standards. All units have EDM External Device Monitoring function for status verification of external devices such as safety relays to avoid external malfunctions jeopardising correct safety functioning, and selectable manual/auto restart. A full range of accessories including floor-mount stands, tube-mounted mirrors, and IP69K food-graded watertight enclosures are also available.

EOS4 1051X		SAFETY LIGHT CURTAIN, 1060mm H, 14mm RES, MAN/AUTO RESTART + EDM	\$4,280.10
EOS4 1053X		SAFETY LIGHT CURTAIN, 1060mm H, 30mm RES, MAN/AUTO RESTART + EDM	\$2,630.20
EOS4 1055X		SAFETY LIGHT CURTAIN, 1060mm H, 50mm RES, MAN/AUTO RESTART + EDM	\$2,194.50
EOS4 1201X		SAFETY LIGHT CURTAIN, 1200mm H, 14mm RES, MAN/AUTO RESTART + EDM	\$4,765.90
EOS4 1203X		SAFETY LIGHT CURTAIN, 1200mm H, 30mm RES, MAN/AUTO RESTART + EDM	\$3,031.90
EOS4 1204X		SAFETY LIGHT CURTAIN, 1200mm H, 40mm RES, MAN/AUTO RESTART + EDM	\$2,528.50
EOS4 1209A		SAFETY LIGHT CURTAIN, 1200mm H, 90mm RES, AUTO START/ RESTART	\$2,268.00
EOS4 1353X		SAFETY LIGHT CURTAIN, 1360mm H, 30mm RES, MAN/AUTO RESTART + EDM	\$2,981.90
EOS4 1354X		SAFETY LIGHT CURTAIN, 1360mm H, 40mm RES, MAN/AUTO RESTART + EDM	\$2,713.80
EOS4 1355A		SAFETY LIGHT CURTAIN, 1360mm H, 30mm RES, AUTO START/RESTART	\$3,205.10
EOS4 1359X		SAFETY LIGHT CURTAIN, 1360mm H, 90mm RES, MAN/AUTO RESTART + EDM	\$2,512.80
EOS4 1503X		SAFETY LIGHT CURTAIN, 1500mm H, 30mm RES, MAN/AUTO RESTART + EDM	\$3,233.10
EOS4 1504X		SAFETY LIGHT CURTAIN, 1500mm H, 40mm RES, MAN/AUTO RESTART + EDM	\$3,074.40
EOS4 1505A		SAFETY LIGHT CURTAIN, 1505mm H, 50mm RES, AUTO START/RESTART	\$2,870.20
EOS4 1505X		SAFETY LIGHT CURTAIN, 1500mm H, 50mm RES, MAN/AUTO RESTART + EDM	\$2,898.10
EOS4 1509A		SAFETY LIGHT CURTAIN, 1500mm H, 90mm RES, AUTO START/ RESTART	\$2,697.10
EOS4 1509X		SAFETY LIGHT CURTAIN, 1500mm H, 90mm RES, MAN/AUTO RESTART + EDM	\$3,078.20
EOS4 151X		SAFETY LIGHT CURTAIN, 160mm H, 14mm RES, MAN/AUTO RESTART + EDM	\$1,553.80
EOS4 153X		SAFETY LIGHT CURTAIN, 160mm H, 30mm RES, MAN/AUTO RESTART + EDM	\$1,088.90
EOS4 1653X		SAFETY LIGHT CURTAIN, 1660mm H, 30mm RES, MAN/AUTO RESTART + EDM	\$3,484.40
EOS4 1803X		SAFETY LIGHT CURTAIN, 1800mm H, 30mm RES, MAN/AUTO RESTART + EDM	\$3,698.90
EOS4 1809X		SAFETY LIGHT CURTAIN, 1800mm H, 90mm RES, MAN/AUTO RESTART + EDM	\$3,395.70
EOS4 2BX		SAFETY LIGHT CURTAIN, 2 BEAM 500mm H, MAN/AUTO RESTART + EDM	\$1,634.30
EOS4 301A		SAFETY LIGHT CURTAIN, 310mm H, 14mm RES, AUTO START/RESTART	\$1,993.50
EOS4 301X		SAFETY LIGHT CURTAIN, 310mm H, 14mm RES, MAN/AUTO RESTART + EDM	\$2,018.60
EOS4 302AH		SAFETY LIGHT CURTAIN, 310mm H, 20mm RES, AUTO RESTART	\$2,253.40
EOS4 303X		SAFETY LIGHT CURTAIN, 310mm H, 30mm RES, MAN/AUTO RESTART + EDM	\$1,289.90
EOS4 3BX		SAFETY LIGHT CURTAIN, 2 BEAM 810mm H, MAN/AUTO RESTART + EDM	\$1,630.00
EOS4 451X		SAFETY LIGHT CURTAIN, 460mm H, 14mm RES, MAN/AUTO RESTART + EDM	\$2,470.90
EOS4 453X		SAFETY LIGHT CURTAIN, 460mm H, 30mm RES, MAN/AUTO RESTART + EDM	\$1,507.70
EOS4 459X	SAFETY LIGHT CURTAIN, 460mm H, 90mm RES, MAN/AUTO RESTART + EDM	\$1,426.40	
EOS4 4BX	SAFETY LIGHT CURTAIN, 4 BEAM 810mm H, MAN/AUTO RESTART + EDM	\$1,732.50	
EOS4 601X	SAFETY LIGHT CURTAIN, 610mm H, 14mm RES, MAN/AUTO RESTART + EDM	\$2,923.20	
EOS4 603X	SAFETY LIGHT CURTAIN, 610mm H, 30mm RES, MAN/AUTO RESTART + EDM	\$2,190.30	
EOS4 604X	SAFETY LIGHT CURTAIN, 610mm H, 40mm RES, MAN/AUTO RESTART + EDM	\$1,541.20	
EOS4 609X	SAFETY LIGHT CURTAIN, 610mm H, 90mm RES, MAN/AUTO RESTART + EDM	\$1,443.80	
EOS4 751A	SAFETY LIGHT CURTAIN, 760mm H, 14mm RES, AUTO START/ RESTART	\$3,383.90	
EOS4 751X	SAFETY LIGHT CURTAIN, 760mm H, 14mm RES, MAN/AUTO RESTART + EDM	\$3,392.20	
EOS4 753X	SAFETY LIGHT CURTAIN, 760mm H, 30mm RES, MAN/AUTO RESTART + EDM	\$1,976.70	
EOS4 759X	SAFETY LIGHT CURTAIN, 760mm H, 90mm RES, MAN/AUTO RESTART + EDM	\$1,641.70	
EOS4 901A	SAFETY LIGHT CURTAIN, 910mm H, 14mm RES, AUTO START/RESTART	\$3,836.20	
EOS4 901X	SAFETY LIGHT CURTAIN, 910mm H, 14mm RES, MAN/AUTO RESTART + EDM	\$3,844.60	
EOS4 903X	SAFETY LIGHT CURTAIN, 910mm H, 30mm RES, MAN/AUTO RESTART + EDM	\$2,228.00	
EOS4 909X	SAFETY LIGHT CURTAIN, 910mm H, 90mm RES, MAN/AUTO RESTART + EDM	\$1,859.50	

Other models to meet your specific requirements indented on request.

## Safety Controllers & Safety Relays



### ReeR Mosaic Safety Controller

Mosaic is a modular, configurable safety controller for protecting machines or plant. It is capable of simultaneously monitoring several safety sensors and commands such as light curtains, laser scanners, photoelectric sensors, safety mats, mechanical switches emergency stops, etc., concentrating management of these signals in a single, flexible device. Many modules in the Mosaic system can be used as stand-alone devices, separately from the Mosaic system

MOSAIC-M1		MAIN UNIT CONFIGURABLE SAFETY CONTROLLER	\$ 809.90
MOSAIC-M1S		MAIN UNIT CONFIGURABLE SAFETY CONTROLLER, ENHANCED	\$ 1,012.50
MOSAIC-M1S-COM		MAIN UNIT CONFIGURABLE SAFETY CONTROLLER, ENHANCED WITH IINTEGRATED FIELDBUS	\$ 1,528.60
MOSAIC-MBEC		MOSAIC ETHERCAT INTERFACE - SCREW TERMINAL	\$ 906.10
MOSAIC-MBEM		MOSAIC MODBUS TCP INTERFACE	\$ 906.10
MOSAIC-MBEP			
MOSAIC-MBU		MOSAIC UNIVERSAL SERIAL INTERFACE	\$ 482.00
MOSAIC-MC100		MOSAIC SHIELDED CABLE FOR MCT BUS TRANSFER 100METRES	\$ 815.40
MOSAIC-MC25		MOSAIC SHIELDED CABLE FOR MCT BUS TRANSFER 25METRES	\$ 217.80
MOSAIC-MC50			
MOSAIC-MCM			
MOSAIC-MCT1	MOSAIC ONE LINE BUS TRANSFER UNIT	\$ 475.70	
MOSAIC-MCT2	MOSAIC TWO LINE BUS TRANSFER UNIT	\$ 552.40	
MOSAIC-M12T8	MOSAIC INPUT EXPANSION UNIT 12 x DI PLUS 8 TEST OUTPUTS	\$ 746.00	
MOSAIC-MI16	MOSAIC INPUT EXPANSION 16 x DI	\$ 674.90	
MOSAIC-MI8			
MOSAIC-MI804		MOSAIC I/O EXPANSION 8 DI 4 x OSSD SINGLE 400mA OUTPUT	\$ 809.90
MOSAIC-MI802		MOSAIC I/O EXPANSION 8 DI 2 x OSSD PAIRS 400mA OUTPUT	\$ 703.40
MOSAIC-MO2		MOSAIC OUTPUT EXPANSION UNIT 2 OSSD PAIRS	\$ 653.10
MOSAIC-MO4		MOSAIC OUTPUT EXPANSION UNIT 2 OSSD PAIRS + 2 PROGRAMMABLE DO	\$ 792.50
MOSAIC-MO4L		MOSAIC OUTPUT EXPANSION UNIT 4 SINGLE OSSD + 2 PROGRAMMABLE DO	\$ 792.50
MOSAIC-MOR4S8			
MOSAIC-MOS16		MOSAIC 16 STATUS OUTPUTS EXPANSION UNIT	\$ 596.80
MOSAIC-MOS8		MOSAIC 8 STATUS OUTPUTS EXPANSION UNIT	\$ 497.40
MOSAIC-MR2		MOSAIC SAFETY RELAY MODULE 4 RELAYS - 4 N.O. + 1 N.C	\$ 332.50
MOSAIC-MR4		MOSAIC SAFETY RELAY MODULE 4 RELAYS - 4 N.O. + 2 N.C	\$ 484.90
MOSAIC-MR8	MOSAIC SAFETY RELAY MODULE 8 RELAYS - 8 N.O. + 4 N.C	\$ 969.80	
MOSAIC-MSC	MOSAIC SAFETY COMMUNICATION BUS CONNECTOR	\$ 35.50	
MOSAIC-MV0		SAFETY SPEED CONTROL EXPANSION - 2 INPUTS FOR PROX SWITCH	\$ 781.50
MOSAIC-MV1H		SAFETY SPEED MONITOR EXPANSION - 1 INPUT FOR HTL ENCODER	\$ 994.70
MOSAIC-MV1S		SAFETY SPEED MONITOR EXPANSION - 1 INPUT SIN/COS ENCODER	\$ 1,150.00
MOSAIC-MV1T		MOSAIC SAFETY SPEED CONTROL EXPANSION - 1 INPUT FOR TTL ENCODER	\$ 1,172.30
MOSAIC-MV2T		MOSAIC SAFETY SPEED CONTROL EXPANSION - 2 INPUT FOR TTL ENCODERS	\$ 1,314.40
MOSAIC-CPM		MOSAIC POLARIZED KEYS (PACK OF 10)	\$ 38.40
MOSAIC-CSU		MOSAIC USB CABLE 1.8M	\$ 41.90
MOSAIC-MC25	MOSAIC SHIELDED CABLE FOR MCT BUS TRANSFER 25METRES	\$ 217.80	
MOSAIC-MC50	MOSAIC SHIELDED CABLE FOR MCT BUS TRANSFER 50METRES	\$ 421.80	
MOSAIC-MC100	MOSAIC SHIELDED CABLE FOR MCT BUS TRANSFER 100METRES	\$ 815.40	

### ReeR Safety Relays & Interfaces

Safety Relay Modules for devices with integrated feedback input for EDM, with force-guided contacts and additional NC contact for monitoring by the light curtain and Safety Interfaces for dedicated interface between safety light curtains and control circuits of machines or plant


AD-SR0		SAFETY RELAY 2NO + 1NC	\$ 227.30
AD-SR1		INTERFACE FOR SAFETY LIGHT CURTAINS	\$ 479.90
AD-SRE4		SAFETY RELAY E STOP* 3NO + 1NC*	\$ 363.40
AD-SRM		ITYPE 4 NTERFACE FOR SAFETY LIGHT CURTAINS WITH MUTING	\$ 617.00
AD-SRT		SAFETY RELAY, TWO HAND CONTROL, 3NO + 1NC	\$ 411.40
AUS X		SAFETY RELAY TYPE 2 - M18 P/CELLS	\$ 479.90
			

### FINDER Force-Guided Relay Modules for Safety Applications

Relay modules with force-guided contacts for safety applications according to EN 50205, 2, 4 or 6-poles. Available in 24Vdc or 230Vac

7S.12-024-5110		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 1NO+1NC 6A@250VAC, 24VDC COIL	\$ 121.30
7S.12-230-5110		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 1NO+1NC 6A@250VAC, 230VAC COIL	\$ 166.70
7S.14-024-4220		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 2NO+2NC 6A@250VAC, 24VDC COIL	\$ 236.40
7S.14-024-4310		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 3NO+1NC 6A@250VAC, 24VDC COIL	\$ 236.40
7S.14-230-0220		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 2NO+2NC 6A@250VAC, 230VAC COIL	\$ 358.30
7S.14-230-4220		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 2NO+2NC 6A@250VAC, 230AC COIL	\$ 324.30
7S.14-230-4310		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 3NO+1NC 6A@250VAC, 230VAC COIL	\$ 324.30
7S.16-024-5420		RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 4NO+2NC 6A@250VAC, 24VDC COIL	\$ 242.50
7S.16-230-0420	RELAY FORCE-GUIDED CONTACTS, DIN MOUNT, 4NO+2NC 6A@250VAC, 230VAC COIL	\$ 368.30	

### CEL Relay Module with Force-Guided Contacts (for Safety Applications)

R-Safety		SAFETY RELAY 2 CH 3 N/O + 1 N/C 4A@250VAC	\$ 344.00
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## Safety Controllers & Safety Relays

### Type 2 and 4 IP69K watertight enclosure safety curtains, with or without heating system

EOS2 and EOS4 IP69K watertight enclosure, with or without heating system Watertight enclosures allow safety light curtains and access control barriers exposure to water and steam. Thanks to its inert (non-toxic) components, no residuals are left when the light curtains are washed down or when or when they come directly in contact with food. This makes WTF and WTHF enclosures suitable for the Food & Beverage industry. WTHF version (heated) has a thermostatically controlled heating system and can work down to -25°C.

EOS2-1203-X-WTF	SAFETY LIGHT CURTAIN, IP69K, 1210mm H, 30mm RES, MAN/AUTO RESTART	\$ 3,340.90
EOS2-1203-X-WTHF	SAFETY LIGHT CURTAIN, IP69K, HEATER, 1210mm H, 30mm RES, MAN/AUTO RESTART	\$ 3,739.40
EOS4-1203-XH-WTF	SAFETY LIGHT CURTAIN IP69K, 1200mm H, 30mm RES, MAN/AUTO RESTART	\$ 4,701.90
EOS4-1203-XH-WTHF	SAFETY LIGHT CURTAIN IP69K, HEATER, 1200mm H, 30mm RES, MAN/AUTO RESTART	\$ 5,100.50
EOS4-903-XH-WTHF	SAFETY LIGHT CURTAIN IP69K, HEATER, 900mm H, 30mm RES, MAN/AUTO RESTART	\$ 4,471.70

Other models to meet your specific requirements indented on request.

### EOS4 BX series wide beam series

EOS4 2BX	SAFETY LIGHT CURTAIN, 2 BEAM 500mm H, MAN/AUTO RESTART + EDM	\$ 1,634.30
EOS4 3BX	SAFETY LIGHT CURTAIN, 2 BEAM 810mm H, MAN/AUTO RESTART + EDM	\$ 1,630.00
EOS4 4BX	SAFETY LIGHT CURTAIN, 4 BEAM 810mm H, MAN/AUTO RESTART + EDM	\$ 1,732.50

### SAFEGATE series -TYPE 4 SIL3-PLe Safety light curtain with integrated muting functions

The new SAFEGATE type 4 range of safety light curtains is the ideal solution for the protection of a vast number of high-risk industrial applications, in particular those requiring a high level of integration of the muting functions.

S 2B TRX	SAFEGATE CURTAIN - TRANSCEIVER SET 510MM 2 BEAM. TYPE 4-SIL3-PLe	\$ 1,905.80
S 3B TRX	SAFEGATE CURTAIN - TRANSCEIVER SET 810MM 3 BEAM. TYPE 4-SIL3-PLe	\$ 2,142.50
S 4B TRX	SAFEGATE CURTAIN - TRANSCEIVER SET 910MM 4 BEAM. TYPE 4-SIL3-PLe	\$ 2,310.00
SM 3B TRX	SAFEGATE CURTAIN - TRANSCEIVER SET 810MM 3 BEAM-BUILT IN MUTING	\$ 2,142.00
SM 4B TRX	SAFEGATE CURTAIN - TRANSCEIVER SET 910MM 4 BEAM-BUILT IN MUTING. TYPE 4-SIL3-PL	\$ 2,376.40

### Safety Light Curtain Accessories

A full range of accessories including floor-mount stands, tube-mounted mirrors, and IP69K food-grade approved watertight enclosures are available.


CABLE-CD5	CD5 SENSOR CABLE M12-STRAIGHT 5W 5M	\$ 39.10
CABLE-CD95	CD95 SENSOR CABLE M12-RIGHT ANGLE 5W 5M	\$ 39.10
CABLE-C8D5	C8D5 SENSOR CABLE M12 STRAIGHT 8W 5M	\$ 98.20
CABLE-C8D95	C8D5 SENSOR CABLE M12 RIGHT ANGLE 8W 5M	\$ 98.20
CABLE-CD10	CD10 SENSOR CABLE M12 STRAIGHT 5W 10M	\$ 50.30
CABLE-C8D10	C8D10 SENSOR CABLE M12 STRAIGHT 8W 10M	\$ 109.70
CABLE-C8D15	C8D10 SENSOR CABLE M12 STRAIGHT 8W 15M	\$ 121.30
CABLE-C8D20	C8D20 SENSOR CABLE M12 STRAIGHT 8W 20M	\$ 136.30
CABLE-C8D25	C8D25 SENSOR CABLE M12 STRAIGHT 8W 25M	\$ 161.70
CABLE-CD15	CD15 SENSOR CABLE M12 STRAIGHT 5W 15M	\$ 67.10
CABLE-CD20	CD20 SENSOR CABLE M12 STRAIGHT 5W 20M PVC	\$ 82.50
CABLE-CD25	CD25 SENSOR CABLE M12 STRAIGHT 5W 25M PVC	\$ 104.00
CABLE-CD50	CD50 SENSOR CABLE M12 STRAIGHT 5W 50M PVC	\$ 265.70
CFF8P10	SAFEGATE CABLE M12 8 POLE FEMALE-FEMALE STRAIGHT CONNECTORS	\$ 150.20
CS12D10	SAFEGATE CABLE M12 STRAIGHT 12W 10M	\$ 145.90
CS12D25	SAFEGATE CABLE M12 STRAIGHT 12W 25M	\$ 282.70
CS12D3	SAFEGATE M12 12-POLE FEMALE CONNECTOR WITH 3M CABLE	\$ 83.20
CS12USB	SAFEGATE USB-M12 5 POLE ADAPTER FOR LIGHT CURTAIN PROGRAMMING, 2M CABLE	\$ 103.50
CSY12RX	SAFEGATE CONNECTOR Y-M12 5POLE SPLITTER FOR 4 x RECEIVERS	\$ 124.90
CSY12TX	SAFEGATE CONNECTOR Y-M12 5POLE SPLITTER FOR 4 x EMITTERS	\$ 124.90
FE 4	BRACKETS FOR EOS SENSORS (SET OF 4) - ADJUSTABLE	\$ 74.10
FMC S4	SAFETY LIGHT CURTAIN MIRROR COLUMN FOR 4 BEAM LIGHT CURTAINS	\$ 615.00
FMC S 1700	SAFETY LIGHT CURTAIN MIRROR COLUMN, UP TO 1360mm HIGH	\$ 679.80
FMC S 2000	SAFETY LIGHT CURTAIN MIRROR COLUMN, UP TO 1660mm HIGH	\$ 753.80
FMC-EB1700	SAFETY LIGHT CURTAIN MIRROR COLUMN FOR EOS UP TO 1360mm HIGH LIGHT CURTAINS	\$ 565.40
FMC B12	SAFETY LIGHT CURTAIN MIRROR COLUMN FOR L'AND 'T' SHAPE LIGHT CURTAINS	\$ 130.58
FMC CB	SAFETY LIGHT CURTAIN BASE FOR FMC B12 MIRROR SUPPORT COLUMN	\$ 323.10
SAV-4E	RUBBER ISOLATION MOUNT M5 (PACK OF 4)	\$ 28.60
SAV-8E	RUBBER ISOLATION MOUNT M5 (PACK OF 8)	\$ 69.60
SFB 4E	BRACKETS FOR EOS SENSORS (SET OF 4) - SWIVEL	\$ 40.40
SFB 6E	BRACKETS FOR EOS SENSORS (SET OF 6) - SWIVEL	\$ 60.70
SFB E180	BRACKETS FOR EOS SENSORS (SET OF 4) - 180 DEG	\$ 107.70
SP 700 S	DEFLECTING MIRROR -885MM HIGH FOR UP TO 760MM PROTECTED HEIGHT	\$ 464.40
CABLE-C8-G3	C8G3 SENSOR CABLE M8 STRAIGHT 4W 3M	\$ 23.10
CABLE-C8-G5	C8G3 SENSOR CABLE M8 STRAIGHT 4W 5M	\$ 30.70
CABLE-C8-G95	C8G3 SENSOR CABLE M8 RIGHT ANGLE 4W 5M	\$ 30.70

A full range of encoders for industrial applications is available on request

## Magnetic Sensors and Mechanical Safety Switches

### Safelock Safety Switches, electrical and mechanical release, IP67



The SAFELOCK safety switch from REER is used to protect personnel by monitoring and interrupting the safety circuit depending on the position of the machine guard. The 24Vac/dc powered SAFELOCK switch has positive opening-contacts, horizontal or vertical approach direction, and is IP67 protected

SLK-E-P-2NC-24		GUARD LOCK TONGUE SWITCH ELECTRICAL TYPE	\$ 386.30
SLK-M-P-2NC-24		GUARD LOCK TONGUE SWITCH MECHANICAL TYPE	\$ 386.30
ACT-S-A-RB		TONGUE ACTUATOR FOR SLK SWITCH. ANGLED WITH RUBBER BUSH	\$ 38.70
ACT-S-S-RB		TONGUE ACTUATOR FOR SLK SWITCH. STRAIGHT WITH RUBBER BUSH	\$ 32.20

### Magnetic Safety Switches with coded magnets, IP67

Magnetic Safety switches can be connected with:

Either, the Mosaic programmable safety controller, with which they are certified to reach safety level PLe / SIL3 (up to 4 sensors with M1) or, the dedicated interface MGD1, with which they are certified to reach PLd (1 sensor) or PLc (up to 4 sensors)

MG-B-20		SWITCH MAGNETIC MAGNUS BIG 2NO M8 4P	\$ 102.70
MG-B-M		MAGNET FOR MG-B-20 STANDARD	\$ 29.70
MG-B-M+		MAGNET FOR MG-B-20 BIG	\$ 36.60
MG-M-20		SWITCH MAGNETIC MAGNUS M30 2NO M8 4P	\$ 102.70
MG-M-M		MAGNET M30 FOR MG-M-20 STANDARD	\$ 29.70
MG-M-M+		MAGNET M30 FOR MG-M-20 BIG	\$ 36.60
MG-S-20		SWITCH MAGNETIC MAGNUS 2NO M8 4P	\$ 109.60
MG-S-M		MAGNET FOR MG-S-20	\$ 36.60
MG-D1		CONTROL UNIT FOR MAGNUS MAGNETIC SWITCHES	\$ 345.70

### Cables

CABLE-C8-G3	C8G3 SENSOR CABLE M8 STRAIGHT 4W 3M	\$ 23.10
CABLE-C8-G5	C8G3 SENSOR CABLE M8 STRAIGHT 4W 5M	\$ 30.70
CABLE-C8-15	C8G3 SENSOR CABLE M8 STRAIGHT 3W 15M	\$ 62.90
CABLE-C8-5	C8G3 SENSOR CABLE M8 STRAIGHT 3W 5M	\$ 41.90
CABLE-C8-G5	C8G3 SENSOR CABLE M8 STRAIGHT 4W 5M	\$ 30.70
CABLE-C8-G95	C8G3 SENSOR CABLE M8 RIGHT ANGLE 4W 5M	\$ 30.70


## RFID and Inductive Safety Sensors

### MAGNUS RFID Safety Sensors




MAGNUS RFID safety sensors from REER offer three different coding levels: individual, unique or actuator coding to provide the flexibility for the most demanding applications. Available in 22mm or 78mm mounting centres packages, with 5M cables these units provide 8mm sensing, 2 x N/O solid state (400mA max) outputs and IP67/IP69K protection, MAGNUS RFID sensors are suitable for use in almost any industry, including food & beverage, pharmaceuticals and chemicals-handling

MRFIDC-B-C-A-5		RFID SAFETY SWITCH 78mm PITCH ACTUATOR CODED 5M CABLE	\$ 379.40
MRFIDC-B-C-A-M		Combo (sensor + actuator) - Actuator coded - M12 connector - Interaxis 78mm	\$ 401.10
MRFIDC-B-I-A-5		RFID SAFETY SWITCH 78mm PITCH INDIVIDUAL CODE 5M CABLE	\$ 433.70
MRFIDC-B-I-A-M		RFID SAFETY SWITCH Combo (sensor+ actuator) INDIVIDUAL CODING M12 CONNECTOR INT	\$ 455.30
MRFIDC-B-U-A-5		RFID SAFETY SWITCH 78mm PITCH UNIQUE CODE 5M CABLE	\$ 487.90
MRFIDC-S-C-A-5		RFID SAFETY SWITCH 22mm PITCH ACTUATOR CODED 5M CABLE	\$ 379.40
MRFIDC-S-C-A-M		RFID SAFETY SWITCH Combo (sensor + actuator) 1292000	\$ 401.10
MRFIDC-S-I-A-5		RFID SAFETY SWITCH 22mm PITCH INDIVIDUAL CODE 5M CABLE	\$ 379.40
MRFIDC-S-I-A-M		RFID SAFETY SWITCH SENSOR INDIVIDUAL CODING M12 CONNECTOR INTERAXIS 22mm	\$ 455.30
MRFIDC-S-U-A-5		RFID SAFETY SWITCH 22mm PITCH UNIQUE CODE 5M CABLE	\$ 487.90
MRFID AS		RFID SMALL ACTUATOR 22MM	\$ 130.10
MRFID-EC-C4-1		M12 FEMALE CONNECTOR, 4 POLES STRAIGHT 1M	\$ 38.40
MRFID-EC-C8-1		M12 FEMALE CONNECTOR, 8 POLES STRAIGHT 1M	\$ 84.50
MRFID-EC-C8-10		CABLE M12 FEMALE CONNECTOR, 8 POLES STRAIGHT 10 METRES	\$ 138.30
MRFID-EC-C8-5		cabl M12 Female Connector, 8 poles straight 5m 1292412	\$ 107.50
MRFID-EC-L4-1		M12 MALE/FEMALE CONNECTOR, 4 POLES RIGHT ANGLE 1M 1292418	\$ 69.20
MRFID-EC-S4-1		M12 MALE/FEMALE CONNECTOR, 4 POLES STRAIGHT 1M 1292414	\$ 61.50
MRFID-EC-S4-5		M12 MALE/FEMALE CONNECTOR, 4 POLES RIGHT ANGLE 5M	\$ 76.90
MRFID-TC-A		T CONNECTOR TYPE A	\$ 115.20
MRFID-TC-B		RFID SAFETY SWITCH T CONNECTOR TYPE B	\$ 115.20

### REER Rsafe RFID Safety Switch



RRFID A S G		RFID STANDARD ACTUATOR, 22mm, GENERIC CODING	\$ 92.00
RRFID PLUS C S G C		RFID COMBO (SENSOR + ACTUATOR), GENERIC CODING, INTERAXIS 22mm, M12 8-POLE	\$ 260.00
RRFID PLUS C S T C		RFID COMBO (SENSOR + ACTUATOR), TEACH-IN CODING, INTERAXIS 22mm, M12 8-POLE	\$ 275.00
RRFID PLUS C S U C		RFID COMBO (SENSOR + ACTUATOR), UNIQUE CODING, INTERAXIS 22mm, M12 8-POLE	\$ 290.00

### Pizzato RFID Safety Switch

PZ NG 2D1D411A-F30		NG SERIES RFID SAFETY SWITCH C/W LOCK AND ACTUATOR	\$ 1,278.20	
PZ NG 2D1D411H-F31		NG SERIES RFID SAFETY SWITCH C/W LOCK AND ACTUATOR, WHITE PB M20 CONNECTION	\$ 1,278.20	
PZ NG2D1D411HF31K601		NG SERIES RFID SAFETY SWITCH C/W LOCK AND ACTUATOR, WH PB 1 NC/1NO, M23 CONNECT	\$ 1,369.05	
PZ NG-F30		CODED ACTUATOR, LOW LEVEL FOR NG SERIES	\$ 246.95	
PZ NS D4AZ1SMK-F40		NS SERIES RFID SAFETY SWITCH C/W LOCK AND ACTUATOR	\$ 879.20	
PZ NS E4ZZ1SMK-F40		NS SERIES RFID SAFETY SWITCH C/W LOCK AND ACTUATOR - POWER TO LOCK	\$ 879.20	
PZ NSD4AZ1SRKF4N005		NS SERIES RFID SAFETY SWITCH WITH LOCK AND INTEGRATED CONTROL	\$ 956.88	
PZ NSE4TE1SRKF4N088			NS SERIES RFID SAFETY SWITCH C/W LOCK AND ACTUATOR + 3 BUTTON OPERATOR STATION	\$ 1,140.00
PZ SM D0T			CODED ACTUATOR, LOW LEVEL, USED WITH ST D, ST G, ST H SAFETY SENSORS	\$ 37.50
PZ SM D1T			CODED ACTUATOR, HIGH LEVEL, USED WITH ST D, ST G, ST H SAFETY SENSORS	\$ 37.50
PZ SM H0T			CODED ACTUATOR, LOW LEVEL, USED WITH ST G, ST H SAFETY SENSORS	\$ 38.20
PZ SM H1T	CODED ACTUATOR, HIGH LEVEL, USED WITH ST G, ST H SAFETY SENSORS		\$ 38.20	
PZ ST DD420MK-D1T	ST-DD SERIES RFID SAFETY SENSOR (ACTUATOR INCLUDED)		\$ 337.50	
PZ ST GD420MP	ST-G SERIES 22mm RFID SAFETY SENSOR (USED WITH SMART KUBE)		\$ 268.40	
PZ ST HD420MP	ST-H SERIES 78mm RFID SAFETY SENSOR		\$ 304.50	
		PZ SM D1T		

### PI-SAFE Inductive Safety Sensors

PI-SAFE Inductive Proximity sensors provide a wear-free, non-contact detection of metal objects such as doors or flaps at closed position with 2 x OSSD (Output Signal Switching Device) outputs, 10-30Vdc


PI M12 B		PI-SAFE M12 ANGLE BRACKET	\$ 14.10
PI M12 NF		PI-SAFE M12 INDUCTIVE PROXIMITY 0.5-4MM-UNSHIELDED -2 OSSD OUTPUTS- PLd	\$ 423.80
PI M18 B		PI-SAFE M18 ANGLE BRACKET	\$ 14.10
PI M18 F		PI-SAFE M18 INDUCTIVE PROXIMITY 1-5MM SHIELDED -2 OSSD OUTPUTS- PLd	\$ 491.10
PI M18 FR		PI-SAFE M18 INDUCTIVE PROXIMITY 10MM SHIELDED -2 OSSD OUTPUTS- PLd	\$ 470.90
PI M18 NF		PI-SAFE M18 INDUCTIVE PROXIMITY 1-8MM-UNSHIELDED -2 OSSD OUTPUTS- PLd	\$ 477.60
PI M30 B		PI-SAFE M30 ANGLE BRACKET	\$ 21.10
PI M30 F		PI-SAFE M30 INDUCTIVE PROXIMITY 1-10MM SHIELDED -2 OSSD OUTPUTS- PLd	\$ 491.10
PI M30 NF		PI-SAFE M30 INDUCTIVE PROXIMITY 1-15MM UNSHIELDED -2 OSSD OUTPUTS- PLd	\$ 477.60
PI M30 NF K		PI-SAFE M30 INDUCTIVE PROXIMITY IP69K 6-12MM UNSHIELDED -2 OSSD OUTPUTS- PLd	\$ 1,069.60
PI SQ F NF		PI-SAFE SQUARE INDUCTIVE PROXIMITY 10-15MM SHIELDED/UNSHIELDED -2 OSSD OUTPUTS-	\$ 1,096.50
PI SQ NF	PI-SAFE SQUARE INDUCTIVE PROXIMITY 4-20MM UNSHIELDED -2 OSSD OUTPUTS-	\$ 1,096.50	
		PI M18 B	



## Safety Laser Scanners


### ReeR Safety Scanners Safety monitoring of dangerous areas. IP65 protected

The Safety Laser Scanner is an electro-sensitive device for the protection of operators against the risk of accidents caused by industrial machines and plants with potential dangerous moving parts and against possible collisions with Automatic Guided Vehicles (AGV). Using the Safety Laser Sensor, precise programmable horizontal protected areas of variable shape can be created (i.e. semi-circular, rectangular or segmented), suitable for all applications with no need of a separate reflective or receiving element. It is also possible to use the Laser Scanner in a vertical position for the access protection to a dangerous area, in that case detection of the edge of the area is mandatory. The Hokuyo UAM series is the smallest size in the world with a versatile range for safety applications. Protection over 5 meters and warning one up to 20 meters. Can simultaneously protect two hazardous zones. SIL 2 - SILCL2 / PL d - Cat. 3

UAM-05LP-T301		HOKOYU SAFETY LASER SCANNER WITH 5M INTEGRAL CABLE	\$	7,241.90
UAM-05LP-T301C		HOKOYU SAFETY LASER SCANNER WITH CONNECTOR	\$	7,241.90
UAM-30LS-TOWER-SHORT		HOKOYU SCANNER TOWER-SHORT	\$	649.99
UAM-BK03		HOKOYU SCANNER MOUNTING BRACKET	\$	255.30
UAM-BK04		HOKOYU SCANNER VERTICAL REAR MOUNT BRACKET	\$	376.80
UAM-BK05		HOKOYU SCANNER COVER PROTECTION BRACKET	\$	182.40
UAM-ENET		HOKOYU ETHERNET CABLE 3 METRES	\$	481.30
UAM-MUSB		HOKOYU SCANNER MICRO USB CABLE	\$	48.20
UAM-W002		HOKOYU SCANNER REPLACEMENT WINDOW	\$	952.80
UAM-MPD		HOKOYU ETHERNET CABLE 3 METRES	\$	481.30
UAM-5C02.5M-SPECIAL		HOKOYU SAFETY SCANNER 2.5M EXTENTION CABLE WITH CONNECTOR (JFS)	\$	258.33
UAM-5C05C		HOKOYU SAFETY SCANNER 5M EXTENTION CABLE	\$	1,268.80
UAM-5C07M-SPECIAL		HOKOYU SAFETY SCANNER 7M EXTENTION CABLE WITH CONNECTOR (JFS)	\$	260.00
UAM-5C08M-SPECIAL		HOKOYU SAFETY SCANNER 8M EXTENTION CABLE WITH CONNECTOR (JFS)	\$	258.33
UAM-5C10C	HOKOYU SAFETY SCANNER 10M EXTENTION CABLE WITH CONNECTOR	\$	1,454.70	
UAM-5C10M-SPECIAL	HOKOYU SAFETY SCANNER 10M EXTENTION CABLE WITH CONNECTOR (JFS)	\$	578.50	
UAM-5C15M-SPECIAL	HOKOYU SAFETY SCANNER 15M EXTENTION CABLE WITH CONNECTOR (JFS)	\$	260.00	

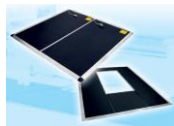
### Datalogic Safety Scanners Safety monitoring for dangerous areas IP65 protected

The Laser Sentinel provides a complete application-oriented solution based on the safe monitoring of a two dimensional area including all functions needed for static horizontal and vertical applications (such as robot cells, machine perimeter protection, machine opening protections, etc.) as well as dynamic applications (such as robot cells, machine perimeter protection, machine opening protections, etc.) as well as dynamic applications (automated guided vehicles, automated guided carts and forklifts) in a compact device with high level detection performances. SIL 2 - SILCL2 / PL d - Cat. 3 Features: I/O connection with standard 8 pin female M12 cable, 1 warning zone, 70mm detection capability 3 zone sets available, metal brackets allow full orientation and fast replacement, auto/manual restart, colour graphic display for monitoring and diagnostics.

SLS-B5-SCANNER		SAFETY LASER SCANNER SIL2, PI d, TYPE 3. 5.5M MAX SAFETY RADIUS AREA 40M	\$	6,928.80
SLS-BRACKET-A		SAFETY LASER SCANNER COMPLETE BRACKET SYSTEM	\$	363.80
SLS-SA5-08		SAFETY LASER SCANNER SIL2, PI d, TYPE 3. 5.5M MAX SAFETY RADIUS AREA 40M 6 ZONE	\$	7,331.40
CS-A1-06-U-10		CABLE M12 8POLE 10M FOR SLS SCANNER	\$	76.20

### Gamma Systems Safety Mats, Pressure Sensitive Edges and Bumper stops

Gamma System SAFETY MAT is a "safety component" which acts as an "electrical, pressure sensitive device designed to detect the presence of a human body" and is used in combination with a Safety Relay.



The product range is custom built and indented to order - enquire about a product to meet your specific application needs.

## Limit Switches & Microswitches

### DIN Size Plastic & Metal Limit Switches – IP67

PZ FR501-M2		LIMIT SWITCH, PISTON PLUNGER, RESIN BODY,1NO+1NC, M20 GLAND	\$	68.60
PZ FR515-M2		LIMIT SWITCH, ROLLER PISTON PLUNGER, RESIN BODY,1NO+1NC, M20 GLAND	\$	77.63
PZ FR521-M2		LIMIT SWITCH, WHISKER, RESIN BODY,1NO+1NC, M20 GLAND	\$	68.60
PZ FR502-M2		LIMIT SWITCH, ONE-WAY ROLLER, RESIN BODY,1NO+1NC, M20 GLAND	\$	75.73
PZ FR530-M2		LIMIT SWITCH, BI-DIRECTIONAL METAL ROLLER LEVER, RESIN BODY, 1NO+1NC, M20 GLAND	\$	85.70
PZ FR531-M2		LIMIT SWITCH, BI-DIRECTIONAL ROLLER, RESIN BODY, 1NO+1NC, M20 GLAND	\$	85.70
PZ FR555-M2		LIMIT SWITCH, ADJUSTABLE ROLLER LEVER, RESIN BODY, 1NO+1NC, M20 GLAND	\$	85.70
PZ FR555M2R23		LIMIT SWITCH, ADJUSTABLE LEVER, RESIN BODY, 1NO+1NC, M20 GLAND	\$	89.00
PZ FR569-M2		LIMIT SWITCH, BI-DIRECTIONAL ADJ, 200MM ROD, RESIN BODY,1NO+1NC, M20 GLAND	\$	77.63
PZ FR557-M2		LIMIT SWITCH, PLASTIC ROLLER LEVER ACTUATOR, PLASTIC BODY,1NO+1NC, M20 GLAND	\$	77.63
PZ FR525-M2	LIMIT SWITCH, METAL SPRING, RESIN BODY,1NO+1NC, M20 GLAND	\$	86.38	
PZ FM501-M2		LIMIT SWITCH, PISTON PLUNGER, METAL BODY,1NO+1NC, M20 GLAND	\$	106.08
PZ FM515-M2		LIMIT SWITCH, ROLLER PISTON PLUNGER, METAL BODY,1NO+1NC, M20 GLAND	\$	106.08
PZ FM502-M2		LIMIT SWITCH, ONE-WAY ROLLER, METAL BODY,1NO+1NC, M20 GLAND	\$	106.08
PZ FM505-M2		LIMIT SWITCH, VERTICAL ONE WAY ROLLER LEVER, METAL BODY,1NO+1NC, M20 GLAND	\$	106.08
PZ FM531-M2		LIMIT SWITCH, BI-DIRECTIONAL ROLLER, METAL BODY,1NO+1NC, M20 GLAND	\$	114.35
PZ FM555-M2		LIMIT SWITCH, ADJUSTABLE LEVER, METAL BODY,1NO+1NC, M20 GLAND	\$	118.63
PZ FM569-M2		LIMIT SWITCH, BI-DIRECTIONAL ADJ, 200mm ROD, METAL BODY,1NO+1NC, M20 GLAND	\$	118.83
PZ FM557-M2		LIMIT SWITCH, PLASTIC ROLLER LEVER ACTUATOR, METAL BODY,1NO+1NC, M20 GLAND	\$	118.83
PZ FM525-M2		LIMIT SWITCH, METAL SPRING, METAL BODY,1NO+1NC, M20 GLAND	\$	113.03
PZ FD535-M2		LIMIT SWITCH, BI-DIRECTIONAL ADJ ROLLER LEVER, 1NO+1NC	\$	90.30


A wide variety of other LIMIT SWITCHES are available on request

### Pull Wire Safety Switches with Reset Button – IP66


30mm mounting centres, 10A/250Vac 2 x NC slow-action contacts

E400-08-TBM	ROPE PULL SW w/RESET METAL BODY 30mm	\$	171.90
E100-08-TBI	ROPE PULL SW w/RESET PLASTIC BODY 22mm	\$	163.00

### Common Microswitches (16A/250Vac)

83161806		MICROSWITCH LOW FORCE GOLD CONTACTS	\$	13.70
83161807		MICROSWITCH LOW FORCE GOLD CONTACTS	\$	13.70

### Specialised Microswitches

83123018		MICROSWITCH IP66 WITH 0.5m CABLE	\$	205.00
831370		MICROSWITCH ROTARY ACTION	\$	63.10

### Levers For 83161 Microswitches

LEVER-161-A25	MICROSWITCH LEVER, PLAIN 25.4mm	\$	3.30
LEVER-161-E13	MICROSWITCH LEVER, ROLLER 13.6mm	\$	3.30
LEVER-161-E24	MICROSWITCH LEVER, ROLLER 24.1mm	\$	3.30
LEVER-161-F	MICROSWITCH DUMMY ROLLER LEVER, FOR 83161 R22.2mm	\$	3.30
LEVER-161-G	MICROSWITCH DUMMY ROLLER LEVER, FOR 83161 R21.8mm	\$	2.50

## Ultrasonic Sensors

### Microsonic Ultrasonic Sensors

MIC+ sensors with "TouchControl" electronic push-button control for setup, LED readout for setting target distance parameters in mm/cm or %, M30 nickel-plated housing, M12 plug-in connector

MIC+25/D/TC	ULTRASONIC SENSOR, DIGITAL, M30/250mm 10-30VDC, 1 x PNP, M12	\$	667.00
MIC+25/DD/TC	ULTRASONIC SENSOR, DIGITAL, M30/250mm 10-30VDC, 2 x PNP, M12	\$	921.70
MIC+25/DIU/TC	ULTRASONIC SENSOR, DIGITAL, M30/250mm 10-30VDC, 1 x PNP + 4-20mA, M12	\$	1,461.40
MIC+25/IU/TC	ULTRASONIC SENSOR, DIGITAL, M30/250mm 10-30VDC, 4-20mA, M12	\$	1,206.70
MIC+130/D/TC	ULTRASONIC SENSOR, DIGITAL, M30/1300mm 10-30VDC, 1 x PNP, M12	\$	667.00
MIC+130/DD/TC	ULTRASONIC SENSOR, DIGITAL, M30/1300mm 10-30VDC, 2 x PNP, M12	\$	921.70
MIC+130/DIU/TC	ULTRASONIC SENSOR, DIGITAL, M30/1300mm 10-30VDC, 1 x PNP + 4-20mA, M12	\$	1,461.40
MIC+130/IU/TC	ULTRASONIC SENSOR, DIGITAL, M30/1300mm 10-30VDC, 4-20mA, M12	\$	1,206.70
MIC+130/IU/TC/E	ULTRASONIC SENSOR, DIGITAL, M30/1300mm 10-30VDC, 4-20mA OUT, M12	\$	1,286.30
MIC+340/D/TC	ULTRASONIC SENSOR, DIGITAL, M30/3400mm 10-30VDC, 1 x PNP, M12	\$	715.50
MIC+340/DD/TC	ULTRASONIC SENSOR, DIGITAL, M30/3400mm 10-30VDC, 2 x PNP, M12	\$	1,006.60
MIC+340/DIU/TC	ULTRASONIC SENSOR, DIGITAL, M30/3400mm 10-30VDC, 1 x PNP + 4-20mA, M12	\$	1,271.00
MIC+340/IU/TC	ULTRASONIC SENSOR, DIGITAL, M30/3400mm 10-30VDC, 1 x PNP + IOLINK, M12	\$	715.50
MIC+340/IU/TC	ULTRASONIC SENSOR, DIGITAL, M30/3400mm 10-30VDC, 4-20mA, M12	\$	1,283.10
MIC+600/D/TC	ULTRASONIC SENSOR, DIGITAL, M30/6000mm 10-30VDC, 1 x PNP, M12	\$	788.30
MIC+600/DD/TC	ULTRASONIC SENSOR, DIGITAL, M30/6000mm 10-30VDC, 2 x PNP, M12	\$	1,085.50
MIC+600/DIU/TC	ULTRASONIC SENSOR, DIGITAL, M30/6000mm 10-30VDC, 1 x PNP + 4-20mA, M12	\$	1,620.20
MIC+600/IU/TC	ULTRASONIC SENSOR, DIGITAL, M30/6000mm 10-30VDC, 4-20mA, M12	\$	1,364.40
CRM+25/IU/TC/E	ULTRASONIC SENSOR, DIGITAL, S/S 250mm ANALOG OUT	\$	1,443.20
CRM+35/D/TC/E	ULTRASONIC SENSOR, DIGITAL, PEEK FACE M30/85-350mm RANGE, 10-30VDC, PNP OUTPUT	\$	921.70
CRM+130/IU/TC/E	ULTRASONIC SENSOR, DIGITAL, S/S, M30/1300mm, 10-30VDC, ANALOG OUT	\$	1,273.40
CRM+600/IU/TC/E	ULTRASONIC SENSOR, DIGITAL, S/S M30/6000mm RANGE, 10-30VDC, ANALOG OUT	\$	1,607.00



ZWS block-type sensors offer a compact solution to almost any precision sensing application with a teach-in button for ease of set-up and 3 sensing modes in one device (single detect, two-way reflective and window mode), M8 plug-in connector

ZWS7/CD/QS	ULTRASONIC SENSOR BLOCK, 150mm SN, 10-30VDC, PNP NO+NC, M8	\$	551.90
ZWS15/CD/QS	ULTRASONIC SENSOR BLOCK, 150mm SN, 10-30VDC, PNP NO+NC, M8	\$	551.90
ZWS15/CE/QS	ULTRASONIC SENSOR BLOCK, 150mm SN, 10-30VDC, 4-20mA, M8	\$	661.00
ZWS70/CD/QS	ULTRASONIC SENSOR BLOCK, 700mm SN, 10-30VDC, PNP NO+NC, M8	\$	594.20
ZWS70/CE/QS	ULTRASONIC SENSOR BLOCK, 700mm SN, 10-30VDC, PNP NO+NC, M8	\$	594.20
ZWS70/CI/QS	ULTRASONIC SENSOR BLOCK, 700mm SN, 10-30VDC, 4-20mA, M8	\$	703.40
ZWS1 SOUNDPIPE	SOUNDPIPE FOR ZWS1 SENSOR	\$	30.40



PICO+ is a series of compact sensors with M18 threaded housing and 41mm housing length, with 3 sensing modes in one device (single detect, two-way reflective and window mode), M12 plug-in connector, 10-30Vdc

PICO+100/F	ULTRASONIC SENSOR, M18/1000mm, 10-30VDC, PNP NO, M12	\$	661.00
PICO+100/F/A	ULTRASONIC SENSOR, M18/1000mm, 10-30VDC, PUSH-PULL I/O LINK 1.1, M12	\$	661.00
PICO+100/I	ULTRASONIC SENSOR, M18/1000mm, 10-30VDC, 4-20mA, M12	\$	842.90
PICO+100/TF/I	ULTRASONIC SENSOR, M18/1000mm, 10-30VDC, 4-20mA, M12	\$	929.80
PICO+100/U	ULTRASONIC SENSOR, M18/1000mm, 10-30VDC, 0-10V, M12	\$	842.90
PICO+100/WK/F	ULTRASONIC SENSOR, M18/1000mm, 10-30VDC, PNP NO, RT ANGLE HEAD, M12	\$	661.00
PICO+100/WK/F/A	ULTRASONIC SENSOR, M18/1000mm, 10-30VDC, PNP NO, I/O LINK, RT ANGLE HEAD, M12	\$	661.00
PICO+100/WK/I	ULTRASONIC SENSOR, M18/1000mm, 10-30VDC, 4-20mA, RT ANGLE HEAD, M12	\$	842.90
PICO+100/WK/U	ULTRASONIC SENSOR, M18/1000mm, 10-30VDC, 0-10V, M12	\$	842.90
PICO+25/F/A	ULTRASONIC SENSOR, M18/350mm, 10-30VDC, PUSH PULL I/O LINK, M12	\$	661.00
PICO+25/U	ULTRASONIC SENSOR, M18/250mm, 10-30VDC, 0-10V, M12	\$	842.90
PICO+25/WK/F	ULTRASONIC SENSOR, M18/250mm, 10-30VDC, PNP NO, RT ANGLE HEAD, M12	\$	661.00
PICO+25/WK/F/A	ULTRASONIC SENSOR, M18/250mm, 10-30VDC, PNP NO, I/O LINK, RT ANGLE HEAD, M12	\$	661.00
PICO+35/F	ULTRASONIC SENSOR, M18/350mm, 10-30VDC, PNP NO, M12	\$	661.00
PICO+35/F/A	ULTRASONIC SENSOR, M18/600mm, 10-30VDC, PUSH PULL, I/O LINK, M12	\$	661.00
PICO+35/I	ULTRASONIC SENSOR, M18/350mm, 10-30VDC, 4-20mA, M12	\$	842.90
PICO+35/TF/U	ULTRASONIC SENSOR, M18/350mm, 10-30VDC, 0-10V, M12	\$	842.90
PICO+35/U	ULTRASONIC SENSOR, M12/150mm, 10-30VDC, PNP NO, M12	\$	564.00
NANO-15/CD	ULTRASONIC SENSOR, M12/240mm, 10-30VDC, PNP NO, M12	\$	564.00



NERO-100/CD	ULTRASONIC SENSOR, M18/1300mm, 10-30VDC, PNP NO, M8	\$	365.00
NERO-15/CD	ULTRASONIC SENSOR, M18/250mm, 10-30VDC, PNP NO, M8	\$	365.00
NERO-15/CE	ULTRASONIC SENSOR, M18/250mm, 10-30VDC, PNP NO, M8	\$	365.00
NERO-25/CD	ULTRASONIC SENSOR, M18/350mm, 10-30VDC, PNP NO, M8	\$	365.00
NERO-35/CD	ULTRASONIC SENSOR, M18/600mm, 10-30VDC, PNP NO, M8	\$	365.00



CUBE-130/F	ULTRASONIC SENSOR, 2M RANGE, 10-30VDC, 1 x PUSH-PULL OUT, IO-LINK	\$	530.00
CUBE-130/FFIU	ULTRASONIC SENSOR, 2M RANGE, 10-30VDC, 2 x PUSH-PULL + ANALOG, OUT, IO-LINK	\$	960.00
CUBE-340/F	ULTRASONIC SENSOR, 5M RANGE, 10-30VDC, 1 x PUSH-PULL OUT, IO-LINK	\$	575.00
CUBE-340/FFIU	ULTRASONIC SENSOR, 5M RANGE, 10-30VDC, 2 x PUSH-PULL + ANALOG, OUT, IO-LINK	\$	1,025.00
CUBE-35/F	ULTRASONIC SENSOR, 600mm RANGE, 10-30VDC, 1 x PUSH-PULL OUT, IO-LINK	\$	530.00
CUBE-35/FFIU	ULTRASONIC SENSOR, 600mm RANGE, 10-30VDC, 2 x PUSH-PULL + ANALOG, OUT, IO-LINK	\$	960.00



LCS+ very compact block sensors offer a range up to 8M, push-pull switching, 2 x PNP or analogue output (0-10V & 4-20mA) options, with teach-in buttons for ease of set-up, and M12 plug-in connector in a 63x63x37mm package. LinkControl compatible, synchronisable up to 10 units, 9-30Vdc


LCS+340/F	ULTRASONIC SENSOR, 5M RANGE, 10-30VDC, PUSH-PULL OUTPUT	\$	612.50
LCS+340/F/A	ULTRASONIC SENSOR, 5M RANGE, 10-30VDC, PUSH-PULL OUTPUT, I/O LINK 1.1	\$	612.50
LCS+340/IU	ULTRASONIC SENSOR, 5M RANGE, 10-30VDC, ANALOG OUTPUT	\$	1,061.20
LCS+600/DD	ULTRASONIC SENSOR, 8M RANGE, 10-30VDC, 2 x PNP OUTPUT	\$	915.70
LCS+600/F	ULTRASONIC SENSOR, 8M RANGE, 10-30VDC, PUSH-PULL OUTPUT, IO-LINK	\$	685.30
LCS+600/F/A	ULTRASONIC SENSOR, 8M RANGE, 10-30VDC, PUSH-PULL OUTPUT, I/O LINK 1.1	\$	685.30
LCS+600/IU	ULTRASONIC SENSOR, 8M RANGE, 10-30VDC, ANALOG OUTPUT	\$	1,137.60



## Ultrasonic Sensors & I-O Link

### PMS Ultrasonic Sensors for hygiene applications

MICROSONIC PMS Series ultrasonic sensors are designed for situations where hygiene is everything - foodstuffs and pharmaceutical sectors. Conforming to protection categories IP66, IP67, IP68 & the clever design includes a D12 bayonet adapter shaft for quick installation, a stainless steel housing that prevents cleaning fluids building up on any surface, and high resistance to cleaning agent

<b>PMS-100/CF/A1</b>		ULTRASONIC SENSOR, HYGENIC S/S, D12/1000mm, 10-30VDC, PUSH PULL, I/O LINK, M8	\$ 1,068.40
<b>PMS-100/CI/A1</b>		ULTRASONIC SENSOR, HYGENIC S/S, D12/1000mm, 10-30VDC, 4-20mA, M8	\$ 1,201.20
<b>PMS-100/CU/A1</b>		ULTRASONIC SENSOR, HYGENIC S/S, D12/1000mm, 10-30VDC, 1-10V, M8	\$ 1,201.20
<b>PMS-15/CF/A1</b>		ULTRASONIC SENSOR, HYGENIC S/S, D12/150mm, 10-30VDC, PUSH PULL, I/O LINK, M8	\$ 1,068.40
<b>PMS-15/CI/A1</b>		ULTRASONIC SENSOR, HYGENIC S/S, D12/150mm, 10-30VDC, 4-20mA, M8	\$ 1,201.20
<b>PMS-15/CU/A1</b>		ULTRASONIC SENSOR, HYGENIC S/S, D12/150mm, 10-30VDC, 0-10V, M8	\$ 1,201.20
<b>PMS-25/CF/A1</b>		ULTRASONIC SENSOR, HYGENIC S/S, D12/250mm, 10-30VDC, PUSH PULL, I/O LINK, M8	\$ 1,068.40
<b>PMS-25/CI/A1</b>		ULTRASONIC SENSOR, HYGENIC S/S, D12/250mm, 10-30VDC, 4-20mA, M8	\$ 1,201.20
<b>PMS-25/CU/A1</b>		ULTRASONIC SENSOR, HYGENIC S/S, D12/250mm, 10-30VDC, 0-10V, M8	\$ 1,201.20
<b>PMS-35/CF/A1</b>		ULTRASONIC SENSOR, HYGENIC S/S, D12/350mm, 10-30VDC, PUSH PULL, I/O LINK, M8	\$ 1,068.40
<b>PMS-35/CI/A1</b>	ULTRASONIC SENSOR, HYGENIC S/S, D12/350mm, 10-30VDC, 4-20mA, M8	\$ 1,201.20	
<b>PMS-35/CU/A1</b>	ULTRASONIC SENSOR, HYGENIC S/S, D12/250mm, 10-30VDC, 0-10VDC, M8	\$ 1,201.20	
<b>CABLE-PMS-M12/M8</b>		PROGRAMMING CABLE FOR PMS SENSORS	\$ 86.60
<b>PMS-BF-A1</b>		MOUNTING GLAND, STAINLESS STEEL, FOR PMS SENSORS	\$ 167.50

### Ultrasonic Web Edge Detection, Label and Splice Sensors

MICROSONIC web edge, Label and Splice detection, fork sensors offer a compact solution to almost any precision web-detect application, with a teach-in button for ease of set-up, M12 plug-in connector, 20-30Vdc, push-pull output + IO link

<b>ESF-1/CF/A</b>		ULTRASONIC SENSOR, U SHAPED LABEL SENSOR, 70mm FORK PUSH PULL + 1 x PNP + IO LIN	\$ 1,637.20
<b>ESF-1/CI/A</b>		ULTRASONIC SENSOR, U SHAPED LABEL SENSOR, 70mm FORK, EASY TEACH	\$ 1,637.20
<b>BKS-3/CIU</b>		WEB EDGE DETECTION SENSOR 33mm FORK, ANALOGUE O/P	\$ 1,629.90
<b>BKS-6/12/CIU</b>		WEB EDGE DETECTION SENSOR, 120mm FORK ANALOGUE O/P	\$ 1,901.60

### Software and Accessories






<b>LCA-2</b>	ULTRASONIC SENSOR, LINK CONTROL ADAPTOR ONLY	\$ 424.50
<b>LCA-2-CEL</b>	ULTRASONIC SENSOR, LCA-2 MICROSONIC SET-UP TOOL WITH LEADS	\$ 503.60
<b>LCA-2-KOFFER</b>	ULTRASONIC SENSOR, LINK CONTROL ADAPTER V.2. MIC SENSORS	\$ 1,085.50
<b>UF-90/M18</b>	BEAM DEFLECTOR FOR M18 ULTRASONICS	\$ 80.00
<b>UF-90/M30</b>	BEAM DEFLECTOR FOR M30 ULTRASONICS	\$ 80.00

### Cables for Microsonic Plug-in Sensors

<b>CABLE-M12-S-5W-2M</b>	SENSOR CABLE 5W M12 STRAIGHT 2M PVC	\$ 34.00
<b>CABLE-M12-S-5W-5M</b>	SENSOR CABLE 5W M12 STRAIGHT 5M PVC	\$ 42.50
<b>CABLE-M12-S-5W-10M</b>	SENSOR CABLE 5W M12 STRAIGHT 10M PVC	\$ 72.80
<b>CABLE-M12-RA-5W-2M</b>	SENSOR CABLE 5W M12 RT ANGLE 2M PVC	\$ 34.00
<b>CABLE-M12-RA-5W-5M</b>	SENSOR CABLE 5W M12 RT ANGLE 5M PVC	\$ 42.50
<b>CABLE-M12-RA-5W-10M</b>	SENSOR CABLE 5W M12 RT ANGLE 10M PUR	\$ 72.80

# Power Supplies

## Meanwell Surface Mount



HRP-100-24		POWER SUPPLY, 100W 85-264VAC IN, 24VDC 4.5A OUT, PFC	\$ 235.40
HRP-150-12		POWER SUPPLY, 150W 85-264VAC IN, 12VDC 12.5A OUT, PFC	\$ 285.80
HRP-300-12		POWER SUPPLY, 300W 85-264VAC IN, 12VDC 25A OUT, PFC	\$ 433.80
HRP-300-24		POWER SUPPLY, 300W 85-264VAC IN, 24VDC 12.5A OUT, PFC	\$ 433.80
HRP-450-24		POWER SUPPLY, 450W 85-264VAC IN, 24VDC 18.75A OUT, PFC	\$ 693.80
HRP-450-48		POWER SUPPLY, 450W 85-264VAC IN, 48VDC 9.3A OUT, PFC	\$ 693.80
HRP-600-36		POWER SUPPLY, 600W 85-264VAC IN, 36VDC 16.6A OUT, PFC	\$ 724.70
HRP-600-7.5		POWER SUPPLY, 600W 85-264VAC IN, 7.5VDC 80A OUT, PFC	\$ 724.70
LRS-35-12		POWER SUPPLY, 35W, 88-264VAC IN, 24VDC 3A OUT	\$ 49.20
LRS-50-12		POWER SUPPLY, 50W, 88-264VAC IN, 12VDC 4.2A OUT	\$ 54.40
LRS-75-12		POWER SUPPLY, 75W, 88-264VAC IN, 12VDC 6A OUT	\$ 65.70
LRS-100-12		POWER SUPPLY, 100W, 88-264VAC IN, 12VDC 8.5A OUT	\$ 70.20
LRS-150-12		POWER SUPPLY, 150W, 88-264VAC IN, 24VDC 12.5A OUT	\$ 85.90
LRS-200-12		POWER SUPPLY, 200W, 88-264VAC IN, 12VDC 17A OUT	\$ 143.90
LRS-350-12		POWER SUPPLY, 350W, 88-264VAC IN, 12VDC 29A OUT	\$ 179.90
LRS-35-24		POWER SUPPLY, 35W, 88-264VAC IN, 24VDC 1.5A OUT	\$ 49.20
LRS-50-24		POWER SUPPLY, 50W, 88-264VAC IN, 24VDC 2.2A OUT	\$ 54.40
LRS-75-24		POWER SUPPLY, 75W, 88-264VAC IN, 24VDC 3.2A OUT	\$ 65.70
LRS-100-24		POWER SUPPLY, 100W, 88-264VAC IN, 24VDC 4.5A OUT	\$ 70.20
LRS-150-24		POWER SUPPLY, 150W, 88-264VAC IN, 24VDC 3.2A OUT	\$ 85.90
LRS-200-24		POWER SUPPLY, 200W, 88-264VAC IN, 24VDC 8.3A OUT	\$ 143.90
LRS-350-24		POWER SUPPLY, 350W, 88-264VAC IN, 24VDC 14.6A OUT	\$ 179.90
LRS-50-24		POWER SUPPLY, 50W, 88-264VAC IN, 24VDC 2.2A OUT	\$ 54.40
LRS-75-12	POWER SUPPLY, 75W, 88-264VAC IN, 12VDC 6A OUT	\$ 65.70	
LRS-75-24	POWER SUPPLY, 75W, 88-264VAC IN, 24VDC 3.2A OUT	\$ 65.70	
RS-15-3.3		POWER SUPPLY, 15W 88-264VAC IN, 3.3VDC 4.5A OUT	\$ 44.20
RS-15-5		POWER SUPPLY, 15W 88-264VAC IN, 5VDC 3A OUT	\$ 44.20
RS-15-12		POWER SUPPLY, 15W 88-264VAC IN, 12VDC 1.3A OUT	\$ 38.30
RS-15-24		POWER SUPPLY, 15W 88-264VAC IN, 24VDC 0.625A OUT	\$ 38.30
RS-25-12		POWER SUPPLY, 25W 88-264VAC IN, 12VDC 2.A OUT	\$ 47.80
RS-25-24		POWER SUPPLY, 25W 88-264VAC IN, 24VDC 1.04A OUT	\$ 47.80
RS-50-24		POWER SUPPLY, 50W 88-264VAC IN, 24VDC 2.08A OUT	\$ 58.70
RS-75-24		POWER SUPPLY, 75W 88-264VAC IN, 24VDC 3.12A OUT	\$ 68.90
RSP-75-12		POWER SUPPLY 75W 85-264VAC IN, 12VDC 6.3A OUT	\$ 134.40
RSP-75-24		POWER SUPPLY 75W 85-264VAC IN, 24VDC 3.2A OUT	\$ 134.40
RSP-150-12		POWER SUPPLY 150W 85-264VAC IN, 12VDC 12.5A OUT	\$ 173.70
RSP-150-13.5		POWER SUPPLY 150W 85-264VAC IN, 13.5VDC 11.2A OUT	\$ 202.50
RSP-150-15		POWER SUPPLY 150W 85-264VAC IN, 15VDC 10A OUT	\$ 202.50
RSP-150-24		POWER SUPPLY 150W 85-264VAC IN, 24VDC 6.3A OUT	\$ 173.70
RSP-200-12		POWER SUPPLY 200W 85-264VAC IN, 12VDC 16.7A OUT	\$ 201.30
RSP-200-24		POWER SUPPLY 150W 85-264VAC IN, 24VDC 8.3A OUT	\$ 201.30
RSP-200-5		POWER SUPPLY 200W 85-264VAC IN, 5VDC 40A OUT	\$ 241.60
RSP-320-12		POWER SUPPLY 320W 85-264VAC IN, 12VDC 26.7A OUT	\$ 248.70
RSP-320-24		POWER SUPPLY 320W 85-264VAC IN, 24VDC 13.4A OUT	\$ 248.70
RSP-320-4		POWER SUPPLY 320W 85-264VAC IN, 4VDC 60A OUT	\$ 295.00
RSP-320-48		POWER SUPPLY 320W 85-264VAC IN, 48VDC 6.7A OUT	\$ 227.40
RSP-320-5		POWER SUPPLY 320W 85-264VAC IN, 5VDC 60A OUT	\$ 295.00
RSP-500-12		POWER SUPPLY 500W 85-264VAC IN, 12VDC 41.7A OUT	\$ 438.60
RSP-500-24		POWER SUPPLY 500W 85-264VAC IN, 24VDC 21A OUT	\$ 438.60
RSP-750-12		POWER SUPPLY 750W 85-264VAC IN, 12VDC 62.5A OUT	\$ 968.30
RSP-750-24		POWER SUPPLY 750W 85-264VAC IN, 24VDC 32.A OUT	\$ 968.30
RSP-750-48		POWER SUPPLY 750W 85-264VAC IN, 48VDC 15.7A OUT	\$ 968.30
RSP-1000-24		POWER SUPPLY 1000W 90-264VAC IN, 24VDC 40A OUT	\$ 1,245.80
RSP-1000-48	POWER SUPPLY 1000W 90-264VAC IN, 48VDC 20A OUT	\$ 1,245.80	
RSP-1500-24	POWER SUPPLY 1500W 90-264VAC IN, 24VDC 63A OUT	\$ 1,944.70	
RSP-1500-48	POWER SUPPLY 1500W 90-264VAC IN, 48VDC 32A OUT	\$ 1,944.70	
SPV-300-24		POWER SUPPLY, 300W, 88-264VAC IN, 24V 12.5A OUT- PROGRAMABLE VOLTAGE	\$ 433.80
SPV-300-48		POWER SUPPLY, 300W, 88-264VAC IN, 48V 6.25A OUT- PROGRAMABLE VOLTAGE	\$ 433.80
UHP-200R-24		POWER SUPPLY, 200W, 90-264VAC IN, 24VDC 8.4A OUT- REDUNDANT FUNCTION	\$ 274.50
UHP-500-24		POWER SUPPLY, 500W, 90-264VAC IN, 24VDC 20.9A OUT	\$ 423.50
UHP-750-24		POWER SUPPLY, 200W, 90-264VAC IN, 24VDC 31.3A OUT	\$ 862.20




## Meanwell DIN Mount Single Phase

EDR-75-12		POWER SUPPLY, DIN RAIL, 75W 90-264VAC IN, 12VDC 6.3A OUT.	\$ 98.60
EDR-75-24		POWER SUPPLY, DIN RAIL, 75W 90-264VAC IN, 24VDC 3.1A OUT.	\$ 98.60
EDR-120-12		POWER SUPPLY, DIN RAIL, 120W 90-264VAC IN, 12VDC 10A OUT.	\$ 113.60
EDR-120-24		POWER SUPPLY, DIN RAIL, 120W 90-264VAC IN, 24VDC 5A OUT.	\$ 113.60
EDR-150-24		POWER SUPPLY, DIN RAIL, 120W 90-264VAC IN, 24VDC 6.5A OUT.	\$ 118.10
MDR-10-12		POWER SUPPLY, DIN RAIL, 10W, 85-264VAC IN, 12VDC 0.8A OUT	\$ 49.90
MDR-10-24		POWER SUPPLY, DIN RAIL, 10W, 85-264VAC IN, 24VDC 0.4A OUT	\$ 49.90
MDR-20-12		POWER SUPPLY, DIN RAIL, 20W, 85-264VAC IN, 12VDC 1.6A OUT	\$ 58.20
MDR-20-24		POWER SUPPLY, DIN RAIL, 20W, 85-264VAC IN, 24VDC 0.8A OUT	\$ 58.20
MDR-40-12		POWER SUPPLY, DIN RAIL, 40W, 85-264VAC IN, 12VDC 3.3A OUT	\$ 77.70
MDR-40-24		POWER SUPPLY, DIN RAIL, 40W, 85-264VAC IN, 24VDC 1.6A OUT	\$ 77.70
MDR-60-12		POWER SUPPLY, DIN RAIL, 60W, 85-264VAC IN, 12VDC 5A OUT	\$ 82.90
MDR-60-24		POWER SUPPLY, DIN RAIL, 60W, 85-264VAC IN, 24VDC 2.5A OUT	\$ 82.90
MDR-100-12		POWER SUPPLY, DIN RAIL, 100W, 85-264VAC IN, 12VDC 8.2A OUT	\$ 145.80
MDR-100-24		POWER SUPPLY, DIN RAIL, 100W, 85-264VAC IN, 24VDC 4.1A OUT	\$ 145.80
HDR-15-12		POWER SUPPLY, DIN RAIL, 15W, 85-264VAC IN, 12VDC 1.2A OUT	\$ 50.70
HDR-15-24		POWER SUPPLY, DIN RAIL, 15W, 85-264VAC IN, 24VDC 0.6A OUT	\$ 50.70
HDR-30-12		POWER SUPPLY, DIN RAIL, 30W, 85-264VAC IN, 12VDC 2.5A OUT	\$ 61.90
HDR-30-12		POWER SUPPLY, DIN RAIL, 30W, 85-264VAC IN, 12VDC 2.5A OUT	\$ 61.90
HDR-60-12		POWER SUPPLY, DIN RAIL, 60W, 85-264VAC IN, 12VDC 5A OUT	\$ 82.90
HDR-60-24		POWER SUPPLY, DIN RAIL, 60W, 85-264VAC IN, 24VDC 2.5A OUT	\$ 82.90
HDR-100-12		POWER SUPPLY, DIN RAIL, 100W, 85-264VAC IN, 12VDC 8.3A OUT	\$ 118.10
HDR-100-24		POWER SUPPLY, DIN RAIL, 100W, 85-264VAC IN, 24VDC 4.1A OUT	\$ 118.10
HDR-150-12		POWER SUPPLY, DIN RAIL, 150W, 85-264VAC IN, 12VDC 12.5A OUT	\$ 192.30
HDR-150-24		POWER SUPPLY, DIN RAIL, 150W, 85-264VAC IN, 24VDC 6.2A OUT	\$ 147.80
NDR-75-12		POWER SUPPLY, DIN RAIL, 75W, 85-264VAC IN, 24VDC 6.2A OUT	\$ 103.90
NDR-75-24		POWER SUPPLY, DIN RAIL, 75W, 85-264VAC IN, 24VDC 3.1A OUT	\$ 103.90
NDR-75-48		POWER SUPPLY, DIN RAIL, 75W, 85-264VAC IN, 48VDC 1.5A OUT	\$ 132.60
NDR-120-12		POWER SUPPLY, DIN RAIL, 120W, 85-264VAC IN, 12VDC 10A OUT	\$ 1.00
NDR-120-24		POWER SUPPLY, DIN RAIL, 120W, 85-264VAC IN, 24VDC 5A OUT	\$ 122.60
NDR-240-24		POWER SUPPLY, DIN RAIL, 240W, 85-264VAC IN, 24VDC 10A OUT	\$ 231.90
NDR-480-24		POWER SUPPLY, DIN RAIL, 480W, 85-264VAC IN, 24VDC 20A OUT	\$ 438.00
SDR-75-24		POWER SUPPLY, DIN RAIL, 75W, 88-264VAC IN, 24VDC 3.1A OUT	\$ 144.60
SDR-75-12		POWER SUPPLY, DIN RAIL, 75W, 88-264VAC IN, 12VDC 6.25A OUT	\$ 144.60
SDR-120-12		POWER SUPPLY, DIN RAIL, 120W, 88-264VAC IN, 12VDC 10A OUT	\$ 257.40
SDR-120-24		POWER SUPPLY, DIN RAIL, 120W, 88-264VAC IN, 24VDC 5A OUT	\$ 257.40
SDR-240-24		POWER SUPPLY, DIN RAIL, 240W, 88-264VAC IN, 24VDC 10A OUT	\$ 409.50
SDR-480-24		POWER SUPPLY, DIN RAIL, 480W, 88-264VAC IN, 24VDC 20A OUT	\$ 638.10
SDR-480-48		POWER SUPPLY, DIN RAIL, 480W, 88-264VAC IN, 48VDC 10A OUT	\$ 786.30
SDR-480P-24		POWER SUPPLY, DIN RAIL, 480W, 88-264VAC IN, 24VDC 20A OUT	\$ 786.30
SDR-960-24		POWER SUPPLY, DIN RAIL, 960W, 88-264VAC IN, 24VDC 40A OUT	\$ 1,035.40
SDR-960-48		POWER SUPPLY, DIN RAIL, 960W, 88-264VAC IN, 48VDC 20A OUT	\$ 1,317.70

## Meanwell DIN Mount 2/3 Phase

WDR-60-12		POWER SUPPLY, DIN RAIL, 60W, 180-550VAC IN, 12VDC 5A OUT	\$ 175.40
WDR-60-24		POWER SUPPLY, DIN RAIL, 60W, 180-550VAC IN, 24VDC 2.5A OUT	\$ 175.40
WDR-120-12		POWER SUPPLY, DIN RAIL, 120W, 180-550VAC IN, 12VDC 10A OUT	\$ 278.50
WDR-120-24		POWER SUPPLY, DIN RAIL, 120W, 180-550VAC IN, 24VDC 5A OUT	\$ 278.50
WDR-120-48		POWER SUPPLY, DIN RAIL, 120W, 180-550VAC IN, 48VDC 2.5A OUT	\$ 331.00
WDR-240-24		POWER SUPPLY, DIN RAIL, 240W, 180-550VAC IN, 24VDC 10A OUT	\$ 518.70
WDR-480-24		POWER SUPPLY, DIN RAIL, 480W, 180-550VAC IN, 24VDC 20A OUT	\$ 737.00
WDR-480-48		POWER SUPPLY, DIN RAIL, 480W, 180-550VAC IN, 48VDC 10A OUT	\$ 918.90
TDR-480-24		POWER SUPPLY DIN RAIL, 480W, 340-550VAC IN, 24V 20A OUT	\$ 609.30
TDR-960-24		POWER SUPPLY DIN RAIL, 960W, 340-550VAC IN, 24V 40A OUT	\$ 1,137.30
TDR-960-48		POWER SUPPLY DIN RAIL, 960W, 340-550VAC IN, 48V 20A OUT	\$ 1,256.00

## Security Power Supplies

AD-155A		POWER SUPPLY/BATTERY CHARGER, 155W 88-264VAC IN, 13.8VDC 10.5A OUT	\$ 220.40
AD-155B		POWER SUPPLY/BATTERY CHARGER, 155W 88-264VAC IN, 27.8VDC, 5A OUT	\$ 220.40
AD-55A		POWER SUPPLY/BATTERY CHARGER, 55W 88-264VAC IN, 13.8VDC, 3.5A OUT	\$ 158.30
AD-55B		POWER SUPPLY/BATTERY CHARGER, 55W 88-264VAC IN, 27.6VDC 1.8A OUT	\$ 158.30
AD-155-B		POWER SUPPLY/BATTERY CHARGER, 152.75W 27.6V/5VDC 4.5/3A DUAL OUTPUT	\$ 341.30
ADD-55-A		POWER SUPPLY/BATTERY CHARGER, 55W 13.8V/5VDC 2.5/3A DUAL OUTPUT	\$ 185.00

## LED Drivers

APC-03-350		LED DRIVER,100-240VAC IN, 3W 6VDC 350mA CONSTANT CURRENT OUT	\$ 42.50
APC-12-350WE		LED DRIVER, 90-264VAC IN, 12.6W 9-36VDC 350mA CONSTANT CURRENT OUT	\$ 42.50
APC-12-700		LED DRIVER, 90-264VAC IN, 12.6W 9-18VDC 700mA CONSTANT CURRENT OUT	\$ 36.00
APC-16-350		LED DRIVER, 90-264VAC IN, 16.8W 12-48VDC 350mA CONSTANT CURRENT OUT	\$ 39.10
APC-16-700		LED DRIVER, 90-264VAC IN, 16.8W 9-24VDC 700mA CONSTANT CURRENT OUT	\$ 39.10
APC-25-1050		LED DRIVER, 90-264VAC IN, 25.2W 9-24VDC 1050mA CONSTANT CURRENT OUT	\$ 59.70
APC-25-500		LED DRIVER, 90-264VAC IN, 25.2W 15-50VDC 500mA CONSTANT CURRENT OUT	\$ 59.70
APC-25-700		LED DRIVER, 90-264VAC IN, 25.2W 11-36VDC 700mA CONSTANT CURRENT OUT	\$ 59.70
APC-35-1050		LED DRIVER, 90-264VAC IN, 35W 11-33VDC 1050mA CONSTANT CURRENT OUT	\$ 65.80
APC-35-350		LED DRIVER, 90-264VAC IN, 35W 28-100VDC 350mA CONSTANT CURRENT OUT	\$ 65.80
APC-35-700		LED DRIVER, 90-264VAC IN, 35W 15-50VDC 700mA CONSTANT CURRENT OUT	\$ 65.80
APC-8-350		LED DRIVER, 90-264VAC IN, 8W 11-23VDC 350mA CONSTANT CURRENT OUT	\$ 28.80
APV-12-12		LED DRIVER, 90-264VAC IN, 12W 12VDC 0-1A CONSTANT VOLTAGE OUT	\$ 35.00
APV-12-5		LED DRIVER, 90-264VAC IN, 10W 5VDC 0-2A CONSTANT VOLTAGE OUT	\$ 35.00
APV-12E-24		LED DRIVER,180-264VAC IN, 12W 24VDC 0-0.5A CONSTANT VOLTAGE OUT	\$ 36.00
APV-16-24		LED DRIVER,180-264VAC IN, 16W 24VDC 0-0.67A CONSTANT VOLTAGE OUT	\$ 37.10
APV-16E-12		LED DRIVER,180-264VAC IN, 15W 12VDC 0-1.25A CONSTANT VOLTAGE OUT	\$ 37.10
APV-25-12		LED DRIVER, 90-264VAC IN, 25W 12VDC 0-2.1A CONSTANT VOLTAGE OUT	\$ 59.70
APV-25-24		LED DRIVER, 90-264VAC IN, 25W 24VDC 0-1.05A CONSTANT VOLTAGE OUT	\$ 59.70
APV-35-12		LED DRIVER, 90-264VAC IN, 36W 12VDC 0-3A CONSTANT VOLTAGE OUT	\$ 65.80
APV-35-24		LED DRIVER, 90-264VAC IN, 36W 24VDC 0-1.5A CONSTANT VOLTAGE OUT	\$ 65.80
APV-35-5		LED DRIVER, 90-264VAC IN, 25W 5VDC 0-5A CONSTANT VOLTAGE OUT	\$ 65.80
APV-8-12		LED DRIVER, 90-264VAC IN, 8W 12VDC 0-0.67A CONSTANT VOLTAGE OUT	\$ 28.80
HLG-60H-24		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 60W 90-305VAC IN, 24VDC 2.5A OUT	\$ 136.30
HLG-60H-36		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 60W 90-305VAC IN, 36VDC 1.7A OUT	\$ 178.90
HLG-60H-48AB		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 60W 90-305VAC IN, 48VDC 1.3A OUT, ADJ+DI	\$ 188.10
HLG-80H-12A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 60W 90-305VAC IN, 12VDC 5A OUT, ADJ	\$ 208.70
HLG-80H-24		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 80W 90-305VAC IN, 24VDC 3.4A OUT	\$ 162.00
HLG-80H-24A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 80W 90-305VAC IN, 24VDC 3.4A OUT, ADJ	\$ 208.70
HLG-80H-30A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 80W 90-305VAC IN, 30VDC 2.7A OUT, ADJ	\$ 208.70
HLG-80H-42A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 80W 90-305VAC IN, 42VDC 1.7A OUT, ADJ	\$ 208.70
HLG-100H-24		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 96W 90-305VAC IN, 24VDC 4A OUT	\$ 195.60
HLG-100H-48		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 96W 90-305VAC IN, 48VDC 2A OUT	\$ 253.90
HLG-120H-12		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 120W 90-305VAC IN, 12VDC 10A OUT	\$ 201.30
HLG-120H-12A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 120W 90-305VAC IN, 12VDC 10A OUT, ADJ	\$ 261.10
HLG-120H-15		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 120W 90-305VAC IN, 15VDC 8A OUT	\$ 261.10
HLG-120H-24		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 120W 90-305VAC IN, 24VDC 5A OUT	\$ 201.30
HLG-120H-24A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 120W 90-305VAC IN, 24VDC 5A OUT, ADJ	\$ 373.60
HLG-120H-42A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 120W 90-305VAC IN, 42VDC 2.9A OUT, ADJ	\$ 261.10
HLG-120H-48A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 120W 90-305VAC IN, 48VDC 2.5A OUT, ADJ	\$ 261.10
HLG-150H-12A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 150W 90-305VAC IN, 12VDC 12.5A OUT, ADJ	\$ 264.20
HLG-150H-15		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 150W 90-305VAC IN, 15VDC 10A OUT	\$ 264.20
HLG-150H-24A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 150W 90-305VAC IN, 24VDC 6.3A OUT, ADJ	\$ 264.20
HLG-150H-24B		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 150W 90-305VAC IN, 24VDC 6.3A OUT, DIM	\$ 272.40
HLG-150H-36A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 150W 90-305VAC IN, 36VDC 4.2A OUT, ADJ	\$ 264.20
HLG-150H-48A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 150W 90-305VAC IN, 48VDC 3.2A OUT, ADJ	\$ 264.20
HLG-150H-48B		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 150W 90-305VAC IN, 48VDC 3.2A OUT, DIM	\$ 272.40
HLG-185H-12		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 156W 90-305VAC IN, 12VDC 13A OUT	\$ 219.20
HLG-185H-15A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 172W 90-305VAC IN, 15VDC 11.5A OUT, ADJ	\$ 284.80
HLG-185H-24		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 187W 90-305VAC IN, 24VDC 7.8A OUT	\$ 219.20
HLG-185H-24A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 187W 90-305VAC IN, 24VDC 7.8A OUT, ADJ	\$ 284.80
HLG-185H-24B		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 187W 90-305VAC IN, 24VDC 7.8A OUT, DIM	\$ 291.90
HLG-185H-36A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 187W 90-305VAC IN, 36VDC 5.2A OUT, ADJ	\$ 284.80
HLG-185H-36B		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 187W 90-305VAC IN, 36VDC 5.2A OUT, DIM	\$ 291.90
HLG-185H-48A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 187W 90-305VAC IN, 48VDC 3.9A OUT, ADJ	\$ 284.80
HLG-185H-48B		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 187W 90-305VAC IN, 48VDC 3.9A OUT, DIM	\$ 291.90
HLG-240H-12A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 192W 90-305VAC IN, 12VDC 16A OUT, ADJ	\$ 351.60
HLG-240H-24A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 240W 90-305VAC IN, 24VDC 10A OUT, ADJ	\$ 351.60
HLG-240H-24B		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 240W 90-305VAC IN, 24VDC 10A OUT, DIM	\$ 361.80
HLG-240H-36A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 241W 90-305VAC IN, 36VDC 6.7A OUT, ADJ	\$ 351.60
HLG-240H-48A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 240W 90-305VAC IN, 48VDC 5A OUT, ADJ	\$ 351.60
HLG-320H-12		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 264W 90-305VAC IN, 12VDC 22A OUT	\$ 392.10
HLG-320H-12A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 264W 90-305VAC IN, 12VDC 22A OUT, ADJ	\$ 470.80
HLG-320H-12B		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 264W 90-305VAC IN, 12VDC 22A OUT, DIM	\$ 487.20
HLG-320H-15		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 285W 90-305VAC IN, 15VDC 19A OUT	\$ 470.80
HLG-320H-24		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 320W 90-305VAC IN, 24VDC 13.3A OUT	\$ 392.10
HLG-320H-24A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 320W 90-305VAC IN, 24VDC 13.3A OUT, ADJ	\$ 470.80
HLG-320H-42A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 320W 90-305VAC IN, 42VDC 6.7A OUT, ADJ	\$ 470.80
HLG-320H-48		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 320W 90-305VAC IN, 48VDC 6.7A OUT	\$ 470.80
HLG-480H-24A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 480W 90-305VAC IN, 24VDC 20A OUT, ADJ	\$ 715.40
HLG-600H-12A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 480W 90-305VAC IN, 12VDC 40A OUT, ADJ	\$ 743.70
HLG-600H-12B		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 480W 90-305VAC IN, 12VDC 40A OUT, DIM	\$ 988.80
HLG-600H-36A		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 600W 90-305VAC IN, 36VDC 16.7A OUT, ADJ	\$ 968.30
HLN-60H-36B		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 61W 90-305VAC IN, 36VDC 1.7A OUT, DIM	\$ 80.50
HLN-60H-54B		LED DRIVER, CONSTANT VOLTAGE + CURRENT, 62W 90-305VAC IN, 54VDC 1.15A OUT, DIM	\$ 187.10
LPC-20-350		LED DRIVER CONSTANT CURRENT, 16.8W 90-264VAC IN, 9-48VDC 350mA OUT	\$ 64.40
LPC-20-700		LED DRIVER CONSTANT CURRENT, 21W 90-264VAC IN, 9-30VDC 700mA OUT	\$ 52.50
LPC-35-1050		LED DRIVER CONSTANT CURRENT, 31.5W 90-264VAC IN, 9-30VDC 1050mA OUT	\$ 74.10
LPC-35-700		LED DRIVER CONSTANT CURRENT, 33.6W 90-264VAC IN, 9-48VDC 700mA OUT	\$ 74.10
LPC-60-1050		LED DRIVER CONSTANT CURRENT, 50.4W 90-264VAC IN, 9-48VDC 1050mA OUT	\$ 82.30
LPC-60-1400		LED DRIVER CONSTANT CURRENT, 58.8W 90-264VAC IN, 9-42VDC 1400mA OUT	\$ 82.30
LPC-60-1750		LED DRIVER CONSTANT CURRENT, 59.5W 90-264VAC IN, 9-34VDC 1750mA OUT	\$ 82.30
LPV-100-12		LED DRIVER, CONSTANT VOLTAGE, 100W 90-264VAC IN, 12V 8.5A OUT	\$ 114.40
LPV-100-24		LED DRIVER, CONSTANT VOLTAGE, 100W 90-264VAC IN, 24V 4.2A OUT	\$ 114.40
LPV-100-36		LED DRIVER, CONSTANT VOLTAGE, 100W 90-264VAC IN, 36V 2.8A OUT	\$ 133.70
LPV-100-48		LED DRIVER, CONSTANT VOLTAGE, 100W 90-264VAC IN, 48V 2.1A OUT	\$ 133.70
LPV-100-5		LED DRIVER, CONSTANT VOLTAGE, 100W 90-264VAC IN, 5V 12A OUT	\$ 133.70
LPV-150-12		LED DRIVER, CONSTANT VOLTAGE, 150W 90-264VAC IN, 12V 10A OUT	\$ 151.80
LPV-150-24		LED DRIVER, CONSTANT VOLTAGE, 150W 90-264VAC IN, 24V 5A OUT	\$ 151.80
LPV-20-12		LED DRIVER, CONSTANT VOLTAGE, 20W 90-264VAC IN, 12V 1.67A OUT	\$ 52.50
LPV-20-15		LED DRIVER, CONSTANT VOLTAGE, 20W 90-264VAC IN, 15V 1.33A OUT	\$ 52.50
LPV-20-24		LED DRIVER, CONSTANT VOLTAGE, 20W 90-264VAC IN, 24V 0.84A OUT	\$ 52.50
LPV-35-12		LED DRIVER, CONSTANT VOLTAGE, 35W 90-264VAC IN, 12V 3A OUT	\$ 60.40

## LED Drivers & DC-DC Converters

LPV-35-24	LED DRIVER, CONSTANT VOLTAGE, 35W 90-264VAC IN, 24V 1.5A OUT	\$ 60.40
LPV-35-5	LED DRIVER, CONSTANT VOLTAGE, 35W 90-264VAC IN, 5V 5A OUT	\$ 74.10
LPV-60-12	LED DRIVER, CONSTANT VOLTAGE, 60W 90-264VAC IN, 12V 5A OUT	\$ 69.40
LPV-60-24	LED DRIVER, CONSTANT VOLTAGE, 60W 90-264VAC IN, 24V 2.5A OUT	\$ 69.40
LPV-60-48	LED DRIVER, CONSTANT VOLTAGE, 60W 90-264VAC IN, 48V 1.25A OUT	\$ 82.30
PCD-16-1050B	LED DRIVER, DIMMABLE, CONSTANT CURRENT, 16.8W 180-295VAC IN, 12-16VDC, 1050mA OUT	\$ 82.30
PCD-16-350B	LED DRIVER, DIMMABLE, CONSTANT CURRENT, 16.8W 180-295VAC IN, 12-16VDC, 350mA OUT	\$ 82.30
PCD-25-1050B	LED DRIVER, DIMMABLE, CONSTANT CURRENT, 25W 180-295VAC IN, 16-24VDC, 1050mA OUT	\$ 88.40
PCD-25-1400B	LED DRIVER, DIMMABLE, CONSTANT CURRENT, 25W 180-295VAC IN, 16-24VDC, 1400mA OUT	\$ 88.40
PCD-25-350B	LED DRIVER, DIMMABLE, CONSTANT CURRENT, 25W 180-295VAC IN, 16-24VDC, 350mA OUT	\$ 88.40
PCD-25-700B	LED DRIVER, DIMMABLE, CONSTANT CURRENT, 25W 180-295VAC IN, 16-24VDC, 700mA OUT	\$ 88.40
PCD-40-350B	LED DRIVER, DIMMABLE, CONSTANT CURRENT, 40W 180-295VAC IN, 16-24VDC, 350mA OUT	\$ 111.10
PCD-40-500B	LED DRIVER, DIMMABLE, CONSTANT CURRENT, 40W 180-295VAC IN, 16-24VDC, 500mA OUT	\$ 111.10
PCD-40-700B	LED DRIVER, DIMMABLE, CONSTANT CURRENT, 40W 180-295VAC IN, 16-24VDC, 700mA OUT	\$ 111.10
PCD-60-1400B	LED DRIVER, DIMMABLE, CONSTANT CURRENT, 60W 180-295VAC IN, 16-24VDC, 1400mA OUT	\$ 121.30
PCD-60-700B	LED DRIVER, DIMMABLE, CONSTANT CURRENT, 60W 180-295VAC IN, 16-24VDC, 700mA OUT	\$ 121.30



### DC-DC Converters

DDR-120A-24	DC-DC CONVERTER, DIN RAIL, 120W, 9 -18VDC IN, 24VDC 4.2A OUT	\$ 310.50
DDR-120A-48	DC-DC CONVERTER, DIN RAIL, 120W, 9 -18VDC IN, 48VDC 2.1A OUT	\$ 310.50
DDR-120B-24	DC-DC CONVERTER, DIN RAIL, 120W, 16.8-33.6VDC IN, 24VDC 4.2A OUT	\$ 310.50
DDR-15G-12	DC-DC CONVERTER, DIN-RAIL, 15W, 9 -36VDC IN, 12VDC 1.25A OUT	\$ 94.60
DDR-15G-24	DC-DC CONVERTER, DIN-RAIL, 15W, 9 -36VDC IN, 24VDC 0.625A OUT	\$ 94.60
DDR-15G-5	DC-DC CONVERTER, DIN-RAIL, 15W, 9 -36VDC IN, 5VDC 3A OUT	\$ 94.60
DDR-240C-24	DC-DC CONVERTER, DIN-RAIL, 240W, 33.6-67.2VDC IN, 24VDC 10A OUT	\$ 464.60
DDR-240D-24	DC-DC CONVERTER, DIN RAIL, 240W, 67.2-154VDC IN, 24VDC 10A OUT	\$ 464.60
DDR-30G-12	DC-DC CONVERTER, DIN RAIL, 30W, 9 - 36VDC IN, 12VDC 2.5A OUT.	\$ 125.50
DDR-30G-24	DC-DC CONVERTER, DIN RAIL, 30W, 9 - 36 VDC IN, 24VDC 1.25A OUT	\$ 125.50
DDR-480C-24	DC-DC CONVERTER, DIN RAIL, 480W, 33.6-67.2VDC IN, 24VDC 20A OUT	\$ 978.50
DDR-60G-12	DC-DC CONVERTER, DIN RAIL, 60W, 9 - 36VDC IN, 12VDC 5A OUT	\$ 156.30
DDR-60G-24	DC-DC CONVERTER, DIN RAIL, 60W, 9 - 36V IN, 24VDC 2.5A OUT	\$ 156.30
SD-1000H-48	DC-DC CONVERTER, 1000W, 72-144VDC IN, 48VDC 20.8A OUT	\$ 1,358.80
SD-100B-12	DC-DC CONVERTER, 100W, 19-36VDC IN, 12VDC 8.3A OUT	\$ 187.10
SD-100B-24	DC-DC CONVERTER, 100W, 19-36VDC IN, 24VDC 4.1A OUT	\$ 187.10
SD-150B-12	DC-DC CONVERTER, 150W, 19-36VDC IN, 12VDC 12.5A OUT	\$ 246.70
SD-150B-24	DC-DC CONVERTER, 150W, 19-36VDC IN, 24VDC 6.25A OUT	\$ 246.70
SD-150C-12	DC-DC CONVERTER, 150W, 36-72VDC IN, 12VDC 12.5A OUT	\$ 246.70
SD-150D-24	DC-DC CONVERTER, 150W 57.6-154V IN, 24VDC 6.25A OUT	\$ 246.70
SD-15A-12	DC-DC CONVERTER, 15W, 9.2-18VDC IN, 12VDC 1.25A OUT	\$ 71.00
SD-15A-24	DC-DC CONVERTER, 15W, 9.2-18VDC IN, 24VDC 0.625A OUT	\$ 71.00
SD-15A-5	DC-DC CONVERTER, 15W, 9.2-18VDC IN, 5VDC 3A OUT	\$ 71.00
SD-15B-05	DC-DC CONVERTER, 15W, 18-36VDC IN, 5VDC 3A OUT	\$ 71.00
SD-15B-12	DC-DC CONVERTER, 15W, 18-36VDC IN, 12VDC 1.25A OUT	\$ 71.00
SD-15B-24	DC-DC CONVERTER, 15W, 18-36VDC IN, 24VDC 0.625A OUT	\$ 71.00
SD-15C-24	DC-DC CONVERTER, 15W, 36-72VDC IN, 24VDC 0.625A OUT	\$ 71.00



### Security Power Supplies - single output with secondary Battery Charger (UPS function)

DRC-100A	POWER SUPPLY + UPS CHARGER , 100W, 90-264VAC IN, 13.8VDC 4.5A + 2.5A OUT	\$ 256.00
DRC-100B	POWER SUPPLY + UPS CHARGER, 100W, 90-264VAC IN, 27.6VDC 2.25A + 1.25A OUT	\$ 256.00
DRC-40A	POWER SUPPLY + UPS CHARGER, 40W 90-264VAC IN, 13.8VDC 1.9A + 1.0A OUT	\$ 154.20
DRC-40B	POWER SUPPLY + UPS CHARGER , 40W, 90-264VAC IN, 27.6VDC 0.95A + 0.5A OUT	\$ 154.20
DRC-60A	POWER SUPPLY + UPS CHARGER, 60W 90-264VAC IN, 13.8VDC 2.8A + 1.5A OUT	\$ 180.90
DRC-60B	POWER SUPPLY + UPS CHARGER, 60W 90-264VAC IN, 27.6VDC 1.4A + 0.75A OUT	\$ 180.90




### Redundancy Module Power Supply

The DRDN series redundancy module can be used with a Power supply to improve overall system operation reliability. Support N+1 and 1+1 redundancy systems.

DRDN20-24	REDUNDANCY MODULE, 2 CHANNEL INPUT, 1 CHANNEL OUTPUT, 24VDC 20A	\$ 132.60
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## Plug-In Power Supply - 3 pin 230vac

GE1212-P1J		POWER SUPPLY, PLUG-IN,12W 230VAC IN,12VDC 1A OUT	\$ 57.60
GE12124-P1J		POWER SUPPLY, PLUG-IN,12W 230VAC IN, 24VDC 0.625A OUT	\$ 57.60
GE18105-P1J		POWER SUPPLY, PLUG-IN,12W 230VAC IN, 5VDC 2.4A OUT	\$ 78.20
GE18109-P1J		POWER SUPPLY, PLUG-IN,18W 230VAC IN, 9VDC 2A OUT	\$ 78.20
GE18112-P1J		POWER SUPPLY, PLUG-IN,18W 230VAC IN,12VDC 1.5A OUT	\$ 78.20
GE18118-P1J		POWER SUPPLY, PLUG-IN,18W 230VAC IN,18VDC 1A OUT	\$ 78.20
GE24112-P1J		POWER SUPPLY, PLUG-IN, 24W 230VAC IN,12DC 2A OUT	\$ 81.30
GE24124-P1J		POWER SUPPLY, PLUG-IN, 24W 230VAC IN, 24VDC 1A OUT	\$ 81.30
<b>GST25A05-P1J</b>			
GST25A05-P1J		POWER SUPPLY, PLUG-IN, 25W 90-264VAC IN, 5VDC 5A OUT	\$ 68.90
GST25A12-P1J		POWER SUPPLY, PLUG-IN, 25W 90-264VAC IN, 12VDC 2A OUT	\$ 68.90
GST25A24-P1J		POWER SUPPLY, PLUG-IN, 25W 90-264VAC IN, 24VDC 1A OUT	\$ 68.90
GST40A12-P1J		POWER SUPPLY, PLUG-IN, 40W 90-264VAC IN, 12VDC 3.3A OUT	\$ 85.40
GST40A24-P1J		POWER SUPPLY, PLUG-IN, 40W 90-264VAC IN, 24VDC 1.66A OUT	\$ 85.40
GST60A09-P1J		POWER SUPPLY, PLUG-IN, 54W 90-264VAC IN, 9VDC 6A OUT	\$ 94.60
GST60A12-P1J		POWER SUPPLY, PLUG-IN, 60W 90-264VAC IN,12VDC 5A OUT	\$ 94.60
GST60A18-P1J		POWER SUPPLY, PLUG-IN, 60W 90-264VAC IN,18VDC 3.33A OUT	\$ 94.60
GST60A24-P1J		POWER SUPPLY, PLUG-IN, 60W 90-264VAC IN, 24VDC 2.5A OUT	\$ 94.60
GST90A12-P1M		POWER SUPPLY, PLUG-IN, 80W 90-264VAC IN,12VDC 6.67A OUT	\$ 154.20
GST90A15-P1M		POWER SUPPLY, PLUG-IN, 90W 90-264VAC IN,15VDC 6A OUT	\$ 154.20
GST90A24-P1M		POWER SUPPLY, PLUG-IN, 90W 90-264VAC IN, 24VDC 3.75A OUT	\$ 154.20
GST120A24-P1M		POWER SUPPLY, PLUG-IN,120W 90-264VAC IN, 24VDC 5A OUT	\$ 182.40
<b>GSM40A09-P1J</b>			
GSM40A09-P1J		POWER SUPPLY, PLUG-IN, 40W,90-264VAC IN, 9VDC,4.5A OUT	\$ 110.00
GSM90B24-P1M		POWER SUPPLY, PLUG-IN, 90W 90-264VAC IN, 24VDC 3.75A OUT	\$ 169.70

## DC-DC Convertors

DDR-120A-24		DC-DC CONVERTER, DIN RAIL, 120W, 9 -18VDC IN, 24VDC 4.2A OUT	\$ 310.50
DDR-120A-48		DC-DC CONVERTER, DIN RAIL, 120W, 9 -18VDC IN, 48VDC 2.1A OUT	\$ 310.50
DDR-120B-24		DC-DC CONVERTER, DIN RAIL, 120W, 16.8-33.6VDC IN, 24VDC 4.2A OUT	\$ 310.50
DDR-15G-12		DC-DC CONVERTER, DIN-RAIL, 15W, 9 -36VDC IN, 12VDC 1.25A OUT	\$ 94.60
DDR-15G-24		DC-DC CONVERTER, DIN-RAIL, 15W, 9 -36VDC IN, 24VDC 0.625A OUT	\$ 94.60
DDR-15G-5		DC-DC CONVERTER, DIN-RAIL, 15W, 9 -36VDC IN, 5VDC 3A OUT	\$ 94.60
DDR-240C-24		DC-DC CONVERTER, DIN-RAIL, 240W,33.6-67.2VDC IN, 24VDC 10A OUT	\$ 464.60
DDR-240D-24		DC-DC CONVERTER, DIN RAIL, 240W, 67.2-154VDC IN, 24VDC 10A OUT	\$ 464.60
DDR-30G-12		DC-DC CONVERTER, DIN RAIL, 30W, 9 - 36VDC IN, 12VDC 2.5A OUT.	\$ 125.50
DDR-30G-24		DC-DC CONVERTER, DIN RAIL, 30W, 9 - 36 VDC IN, 24VDC 1.25A OUT	\$ 125.50
DDR-480C-24		DC-DC CONVERTER, DIN RAIL, 480W, 33.6-67.2VDC IN, 24VDC 20A OUT	\$ 978.50
DDR-60G-12		DC-DC CONVERTER, DIN RAIL, 60W, 9 - 36VDC IN, 12VDC 5A OUT	\$ 156.30
DDR-60G-24		DC-DC CONVERTER, DIN RAIL, 60W, 9 - 36V IN, 24VDC 2.5A OUT	\$ 156.30
<b>RSD-100B-24</b>			
RSD-100B-24		DC-DC CONVERTER, 100W 16.8-31.2VDC IN, 24VDC 4.2A OUT	\$ 336.10
RSD-100D-12		DC-DC CONVERTER, 100W 67.2-143VDC IN, 12VDC 8.4A OUT	\$ 336.10
RSD-100D-24		DC-DC CONVERTER, 100W 67.2-143VDC IN, 24VDC 4.2A OUT	\$ 336.10
RSD-150B-12		DC-DC CONVERTER, 150W 16.8-31.2VDC IN, 12VDC 12.5A OUT	\$ 433.80
RSD-150D-24		DC-DC CONVERTER, 150W 67.2-143VDC IN, 24VDC 6.3A OUT	\$ 433.80
RSD-200B-48		DC-DC CONVERTER, 200W 16.8-31.2VDC IN, 48VDC 4.2A OUT	\$ 505.70
RSD-300C-24		DC-DC CONVERTER, 300W 33.6-62.4VDC IN, 24VDC 12.5A OUT	\$ 608.50
<b>SD-25A-12</b>			
SD-25A-12		DC-DC CONVERTER, 25W, 9.2-18VDC IN, 12VDC 2.0A OUT	\$ 120.30
SD-25A-24		DC-DC CONVERTER, 25W, 9.8-18VDC IN, 24VDC 1.1A OUT	\$ 120.30
SD-25B-12		DC-DC CONVERTOR, 25W, 19-36VDC IN , 12VDC 2A OUT	\$ 120.30
SD-25B-24		DC-DC CONVERTOR, 25W, 19-36VDC IN, 24VDC 1.1A OUT	\$ 120.30
SD-25C-12		DC-DC CONVERTER, 25W, 36-72VDC IN, 12VDC 2.08A OUT	\$ 120.30
SD-25C-24		DC-DC CONVERTER, 25W, 36-72VDC/IN, 24VDC 1A OUT	\$ 120.30
SD-50A-5		DC-DC CONVERTER, 50W, 9-18VDC/IN, 5VDC 10A OUT	\$ 149.10
SD-50C-5		DC-DC CONVERTER, 50W, 36-72VDC/5VDC	\$ 149.10
SD-50A-12		DC-DC CONVERTOR, 50W, 9-18VDC IN, 12VDC 4.1A OUT	\$ 149.10
SD-50A-24		DC-DC CONVERTER, 50W, 9-18VDC IN, 24VDC 2.08A OUT	\$ 149.10
SD-50B-12		DC-DC CONVERTER, 50W, 19-36VDC IN, 12VDC 4.16A OUT	\$ 149.10
SD-50B-24		DC-DC CONVERTER, 50W, 19-36VDC IN 24VDC 2.08A OUT	\$ 149.10
SD-50C-24		DC-DC CONVERTER, 50W, 36-72VDC IN, 24VDC 2.08A OUT	\$ 149.10
SD-200B-12		DC-DC CONVERTER, 200W, 9.2-18VDC IN, 12VDC 16.6A OUT	\$ 407.10
SD-200B-48		DC-DC CONVERTER, 200W, 19-36VDC IN, 48VDC 4.2A OUT	\$ 407.10
SD-200C-12		DC-DC CONVERTER, 200W, 36-72VDC IN, 12VDC 16.6A OUT	\$ 407.10
SD-200C-48		DC-DC CONVERTER, 200W,36-72VDC IN, 48VDC 4.1A OUT	\$ 407.10
SD-350C-24		DC-DC CONVERTER, 350W, 36-72VDC IN 24VDC 14.5A OUT	\$ 490.30
SD-500L-12		DC-DC CONVERTER, 500W 19-72V IN, 12VDC 41.6A OUT	\$ 731.90
SD-500L-24		DC-DC CONVERTER, 500W 19-72V IN, 24V 20.8A OUT	\$ 731.90
SD-500L-48		DC-DC CONVERTER, 500W 19-72V IN, 48V 10.4A OUT	\$ 731.90


## Battery Chargers

PB-120N-13C		BATTERY CHARGER 120W , 13.8V OUTPUT	\$ 257.00
PB-120N-27C		BATTERY CHARGER 120W , 27.6V OUTPUT	\$ 257.00
PB-120P-13C		BATTERY CHARGER 0-7.2A/13.8V PFC	\$ 283.70
PB-300P-24		BATTERY CHARGER, 3 STAGE, 300W 28.8V 10.4A, PFC	\$ 475.90
PB-360P-12		BATTERY CHARGER, 3 STAGE, 360W 14.4V, 25A, PFC	\$ 508.80
PB-360P-24		BATTERY CHARGER, 3 STAGE, 360W 27.2V, 12.5A, PFC	\$ 508.80
PB-360P-48		BATTERY CHARGER, 3 STAGE, 360W 57.6V, 6.25A, PFC	\$ 508.80
PB-600-12		BATTERY CHARGER, 2/3/8 STAGE, 600W 14.4VDC, 40A	\$ 1,112.20
PB-600-24		BATTERY CHARGER, 2/3/8 STAGE, 600W 27.6VDC, 21A	\$ 1,112.20
PB-1000-24		BATTERY CHARGER, 2/3/8 STAGE, 1000W 27.2V, 34.7A,	\$ 1,615.80




## Temperature Controllers & Sensor

Autonics TX4S Temperature Controllers 48mm2 with 4 digit bright LCD display 2-metre cable, IP66  
TX4S temperature controller with RTD or Thermocouple input, 2 x relay output, 100-230VAC

TX4S-24R		TEMPERATURE CONTROLLER LCD, 48x48mm, RELAY OUT,100-240VAC	\$ 232.90
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### Autonics Temperature Controllers 72x36mm with 7 segment 15mm 4 digit LED digital display

TC Series - one of the most cost effective temperature controlling solutions. 0.1 - 999.9°C setting range

T4YI-N4NP0C		TEMPERATURE INDICATOR 72X36 PT100/-99.9 to +199.9C, 100-240VAC	\$ 156.60
T4YI-N4NKCC		TEMPERATURE INDICATOR 72X36 KTYPE/0-1200C. 100-240VAC	\$ 156.60
TC3YF-34R		DEFROST CONTROLLER 72X36 100-240VAC	\$ 363.60
TC4L-24R		TEMPERATURE CONTROLLER, 96x96mm, PT100, TYPE K OR J, RELAY OUT,100-240VAC	\$ 244.60
TC4Y-14R		TEMPERATURE CONTROLLER, 72x36mm, PT100, TYPE K OR J, RELAY OUT, 100-240VAC	\$ 390.00

### Autonics Temperature Controller Model T3S Digital

48x48mm 8-pin plug-in temperature controllers with 7-segment red LED display, ON/OFF or proportional control, built-in burnOUT out protection, SPDT/2A relay output, 90 - 264Vac supply

T3S-B4RK4C		TEMPERATURE CONTROLLER, 48x48mm, 0-399degC K TYPE,100-240VAC	\$ 343.70
T3S-B4RK8C		TEMPERATURE CONTROLLER, 48x48mm, 0-800degC K TYPE, 100-240VAC	\$ 343.70
T3S-B4RP1C		TEMPERATURE CONTROLLER, 48x48mm, 0-99.9degC PT100, 100-240VAC	\$ 343.70
T3S-B4RP2C		TEMPERATURE CONTROLLER, 48x48mm, 0-199degC PT100, 100-240VAC	\$ 343.70


### Autonics Temperature Controller Model TZN4S-14R Digital, Multifunction

48x48mm temperature controllers with 4-digit LED display, dual PID autotuning or ON/OFF control, multi-sensor (select from K, J, R, E, T, S, N, W thermocouples, Pt100, 0-5V, 0-10V, 4-20mA) multi-range °C or °F, two set points, IP65 front panel, SPST 3A relay output, 90 - 264Vac supply

TZN4S-14R		DUAL PID TEMP CONTROLLER	\$ 388.60
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### Autonics Temperature controller TC4L-24R 96x96mm

96x96mm temperature controller with 7-segment red LED display 11mm high, ON/OFF or proportional control, built-in burnout protection, SPDT 3A relay and SSR output, 2 x alarm outputs 100 - 240Vac supply. Input PT100 and Thermocouples K or J

TC4L-24R		TEMPERATURE CONTROLLER, 96x96mm, PT100, TYPE K OR J, RELAY OUT,100-240VAC	\$ 244.60
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### Autonics Temperature Controller Model TAS Analogue

48x48mm 8-pin plug-in temperature controllers with analogue dial type setting, ON/OFF or PID control, built-in burnout protection, "sensor broken" function display, SPDT/2A relay output, 90 - 264Vac supply



TAS-B4RJ2C		TEMPERATURE CONTROLLER, 48x48mm, 0-200de	\$ 171.90
TAS-B4RK1C		TEMPERATURE CONTROLLER, 48x48mm,0-100de	\$ 171.90
TAS-B4RK2C		TEMPERATURE CONTROLLER, 48x48mm,0-200de	\$ 171.90
TAS-B4RK4C		TEMPERATURE CONTROLLER, 48x48mm,0-400de	\$ 171.90
TAS-B4RP1C		TEMPERATURE CONTROLLER, 48x48mm,0-100de	\$ 171.90
TAS-B4RP2C		TEMPERATURE CONTROLLER, 48x48mm,0-200degC PT100, RELAY OUT,100-240VAC	\$ 171.90

### Akytec Panel Mounted Temperature Indicators

Compact display unit for monitoring temperature, 22mm hole mounting to fit on almost any panel or switchboard - even a push-button control station. Input options thermocouples, RTDs and voltage. Alarm and error indication, adjustable decimal point, NPN output. IP65 protection on front panel.


AKY-ITP16		PANEL MOUNT DIGITAL RED LED, TEMPERATURE DISPLAY- CONTROL 22.5mm, PT100, TYPE K	\$ 277.20
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### Panasonic Digital Temperature Controllers, PT100 or Thermocouple input

KT2-111110		TEMP CTRL 24x48mm 100-240VAC RELAY OUT	\$ 562.80
KT4-212100		TEMPERATURE CONTROL, 48MM, 24V AC/DC SSR DRIVER	\$ 380.30
KT7-111100		TEMP CTRL 24V AC/DC DIN MT RELAY OUTPUT	\$ 395.50
KT7-112100		TEMPERATURE CONTROL 24V AC/DC DIN RAIL MOUNT, SSR DRIVER	\$ 395.50
KT7-211100		TEMPERATURE CONTROL, 24V AC/DC DIN RAIL MOUNT, DC CURRENT OUTPUT	\$ 395.50
KT7-212100			


### Pt100 Temperature Sensors

PT101 monitors the temperature of liquids; PT111 monitors air temperature. Measuring range -50°C to +170°C. Sensor type Pt100 accuracy +1°C. Stainless steel housing, accuracy +1°C. Stainless steel housing, heat resistant silicone cable (length 2 metres).Max. operating temp 200°C. Suitable for temperature relay RM34 or temperature controllers

PT101		TEMPERATURE SENSOR (PT100) FOR LIQUID -50 - +170°C	\$ 157.40
PT105-RT		TEMPERATURE SENSOR (PT100) RING TERMINAL AND MAGNET	\$ 199.00
PT111		TEMPERATURE SENSOR (PT100) FOR AIR -50 - +170°C	\$ 208.90

### Autonics Digital CT6 Counter/Timer Range

A very versatile Counter/Timer for production control applications such as length measurement, volume or quantity. Functions include a timer to 9999.99s and 99999 59m Count up/down or bi-directional (10kcps), batch counting. On-board prescaler and sensor supply (12Vdc). Takes NPN, PNP or contact input. Output 1 x SPST relay, 1 x SPDT relay (2A @ 250Vac) plus 3 x isolated NPN open collector outputs rated 100mA @30Vdc

CT6M-1P2		TIMER COUNTER 72x72mm , 1 PRE-SET, 24VAC, 24-48VDC	\$ 372.80
CT6M-2P4		TIMER/COUNTER 72x72mm, 2 PRE-SET, 110-240VAC	\$ 372.80
CT6S-1P4		TIMER COUNTER 48x48mm,1 PRESET,110-240VAC	\$ 372.80

CT6Y-1P4T	TIMER COUNTER 72x36mm 100-240VAC - MODBUS COMMS	\$ 445.50
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### MP5W Multi-Function Tachometer/Rate Meter

Multifunction pulse/frequency meter for measuring speed, frequency, rpm, cycle time, time interval, length measurement, etc,5-digit LED display, with 12Vdc supply for external sensor


MP5W-4S		PROGRAMMABLE TACHO/RATE METER 96x48mm, 4-20mA OUTPUT	\$ 612.10
MP5W-4N		PROGRAMMABLE TACHO/RATE METER 96x48mm	\$ 486.50
MP5Y-4N		PROGRAMMABLE TACHO/RATE METER 72x36mm	\$ 486.50



## Counters


### Autonics LA8N LCD Totalising Counter

Powered by internal lithium battery (approx 7 years life), DIN 48 x 24mm panel mount, lockable reset button on front panel, IP66 protection (front panel)

LA8N-BF		TOTALISING COUNTER, 8 DIGIT LCD, 48x24mm, VOLTAGE INPUT	\$ 148.10
LA8N-BN		TOTALISING COUNTER, 8 DIGIT LCD, 48x24mm, CONTACT INPUT	\$ 148.10


### Kübler model K 07.20 – 7-Digit Miniature Totaliser

32x15mm panel mount (30x13mm cutout), IP65 protection (front panel), max 25 imp/s dc, 10 imp/s ac

K0720-110VAC		IMPULSE COUNTER, 7 DIGIT, 110VAC	\$ 133.60
K0720-12VDC		IMPULSE COUNTER, 7 DIGIT, 12VDC	\$ 88.60
K0720-230VAC		IMPULSE COUNTER, 7 DIGIT, 230VAC	\$ 133.60
K0720-24VAC		IMPULSE COUNTER, 7 DIGIT, 24VAC	\$ 133.60
K0720-24VDC		IMPULSE COUNTER, 7 DIGIT, 24VDC	\$ 88.60
K0720-24VDC-1R		IMPULSE COUNTER, 7 DIGIT, 24VDC, RED LAST DIGIT	\$ 112.40
K0720-5VDC		IMPULSE COUNTER, 7 DIGIT, 5VDC	\$ 112.40
K0720-5VDC-1R		IMPULSE COUNTER, 7 DIGIT, 5VDC, RED LAST DIGIT	\$ 112.40
K0720-5VDC-2R			

### Kübler model K 47.20 – 7-Digit Miniature Totaliser

30x20mm panel mount (27x14mm cutout), IP65 protection (front panel), max 10 imp/s

K4720-24VDC		IMPULSE COUNTER, 7 DIGIT, 24VDC	\$ 88.60
K4720-24VDC-1R		IMPULSE COUNTER, 7 DIGIT, 24VDC, RED LAST DIGIT	\$ 112.40
K4720-5VDC		IMPULSE COUNTER, 7 DIGIT, 5VDC	\$ 88.60
K4720-5VDC-1R		IMPULSE COUNTER, 7 DIGIT, 5VDC, RED LAST DIGIT	\$ 112.40


### Kübler model W 15.21 – 5-Digit Miniature Adding Counter with Manual Reset

34x23mm panel mount (31.5x21.5mm cutout), max 10 imp/s

W1521-110VAC		IMPULSE COUNTER, 5 DIGIT, 110VAC	\$ 169.20
W1521-12VDC		IMPULSE COUNTER, 5 DIGIT, 12VDC	\$ 138.90
W1521-230VAC		IMPULSE COUNTER, 5 DIGIT, 230VAC	\$ 169.20
W1521-24VAC		IMPULSE COUNTER, 5 DIGIT, 24VAC	\$ 169.20
W1521-24VDC		IMPULSE COUNTER, 5 DIGIT, 24VDC	\$ 138.90

### Kübler model BVA 15.11 – 5-Digit Adding Counter with Stationary Preset Scale

56x68mm panel mount (50x60mm cutout), with relay output when preset is reached. Preset value can be changed during operation

BVA1511-110VAC		IMPULSE COUNTER 5 DIGIT, 110VAC	\$ 482.70
BVA1511-230VAC		IMPULSE COUNTER 5 DIGIT, 230VAC	\$ 482.70


### Panasonic Preset Counters, 2-Colour Backlit LCD Display

LC2HP-FEW-HMKB-24VDC		HOURS RUN COUNTER WITH PRESET, LCD DISPLAY, 48x24mm, 24VDC	\$ 168.60
LC2HP-FEW-B-24VDC		HOURS RUN COUNTER WITH PRESET, LCD DISPLAY, 48x24mm, 24VDC	\$ 168.60
LC4H-PS-R6-240V		LCD COUNTER, 6 DIGIT, 48mm2, 11 PIN PLUG-IN	\$ 402.60
LC4H-PS-R6-240VS		6 DIGIT LCD COUNTER 48mm2 SCREW TERMINAL	\$ 402.60
LC4H-S-R4-24V		LCD COUNTER, 4 DIGIT, 48mm2, 12/24VDC 24VAC	\$ 402.60
LC4HW-R6-240V		LCD COUNTER, 2 PRESET, 6 DIGIT, 48mm2, 240VAC	\$ 463.30
LC4HW-R6-A24V		6 DIGIT LCD 24VAC 2-PRESET COUNT W/LOCK	\$ 463.30
LC4HW-R6-D24V		LCD COUNTER, 2 PRESET, 6 DIGIT, 48mm2, 12-24VDC	\$ 463.30
AT8-R11K		REAR TERMINAL SOCKET 11 PIN	\$ 20.60

## Hours Run Meters

### 6-Digit DIN Rail Mount Hours-Run Meter

48x24mm (45x22.5mm cutout) lithium battery powered hours-run meter, IP66 front panel protection, contact or universal voltage input models, 8 digits (8mm high)

HM-30A6B1-AC		HOUR RUN METER DIN RAIL MOUNT - HM36 90-460VAC	\$ 60.40
HM-30D1B1-DC		HOUR RUN METER DIN RAIL MOUNT - HM36 10-80VDC	\$ 60.40


### Kübler H5755 – 7 Digit Hour Meters for AC or DC Operation

48x48mm panel mount (45x45mm cutout) quartz hours-run meter without reset

H5755-110VAC		HOUR RUN METER 48mm2, H57.55, 110VAC 50HZ	\$ 97.80
H5755-110VAC-60HZ		HOUR RUN METER 48mm2, H57.55, 110VAC 60HZ	\$ 97.80
H5755-230VAC-50HZ		HOUR RUN METER 48mm2, H57.55, 230VAC 50HZ	\$ 97.80
H5755-230VAC-60HZ		HOUR RUN METER 48mm2, H57.55, 230VAC 60HZ	\$ 97.80
H5755-24VAC		HOUR RUN METER 48mm2, H57.55, 24VAC 50HZ	\$ 97.80
H5755-24VAC-60HZ		HOUR RUN METER 48mm2, H57.55, 24VAC 60HZ	\$ 97.80
H5755-24VDC		HOUR RUN METER 48mm2, H57.55, 10-30VDC	\$ 157.40
H5755-400VAC-50HZ		HOUR RUN METER 48mm2, H57.55, 400VAC 50HZ	\$ 97.80
H5755-400VAC-60HZ		HOUR RUN METER 48mm2, H57.55, 400VAC 60HZ	\$ 97.80
H5755-BEZEL		MOUNTING BEZEL BLACK, H57.55, 45mm ID 55mm OD T008171	\$ 10.60
H5755-DIN-ADAPTOR	DIN RAIL MOUNTING ADAPTOR, H57.55	\$ 22.50	

### Autonics 8-Digit LCD Hour Meter Model LE8N

48x24mm (45x22.5mm cutout) lithium battery powered hours-run meter, IP66 front panel protection, contact or universal voltage input models, 8 digits (8mm high)

LE8N-BF		HOURS RUN METER 48x24mm , 8 DIGIT LCD, VOLTAGE INPUT	\$ 148.10
LE8N-BN		HOURS RUN METER 48x24mm , 8 DIGIT LCD, CONTACT INPUT	\$ 148.10


### Kübler H372 – 7 Digit Hour Meter without Reset

53x28mm panel mount (50.5x22.5mm cutout) hours-run meter without reset

H372-110VAC		HOUR RUN METER, 8 DIGIT, 48x24mm,110VAC	\$ 108.40
H372-110VAC-60HZ		HOUR RUN METER, 8 DIGIT, 48x24mm,110VAC 60HZ	\$ 108.40
H372-230VAC		HOUR RUN METER, 8 DIGIT, 48x24mm, 230VAC	\$ 108.40
H372-24VAC		HOUR RUN METER, 8 DIGIT, 48x24mm, 24VAC	\$ 108.40
H372-24VDC		HOUR RUN METER, 8 DIGIT, 48x24mm, 24VDC	\$ 191.70

### Kübler H2621 – 6 Digit Hour Meter with Manual Reset

53x28mm panel mount (50x25mm cutout) hours-run meter with manual reset

HB2611-230VAC-50HZ		SYNCHONISING AND PARALLELING -CHECK RELAY	\$ 2,352.00
HB2621-230VAC-50HZ		HOUR RUN METER, WITH RESET, 6 DIGIT, 53x28mm, 230VAC 50HZ	\$ 215.50

### Mehanizmi HK46 – 7 Digit (5 integers, 2 decimals) Din Standard Hour Meters

48x48mm panel mount (45x45mm cutout) hours-run meter, IP40 front side

HK46-110VAC		HOUR RUN METER 48mm2 - HK46, 110V 50HZ	\$ 59.60
HK46-230VAC		HOUR RUN METER 48mm2 - HK46, 230V 50HZ	\$ 59.60
HK46-230VAC-ALCLMP		HOUR RUN METER 48mm2 - HK46, 230V 50HZ/ALUM CLAMP	\$ 59.60
HK46-6-30VDC		HOUR RUN METER 48mm2 - HK46, 6-30VDC	\$ 89.90
HK46-BEZEL		MOUNTING BEZEL 55x55mm FOR HK46/HM700	\$ 4.90

### Mehanizmi HK48 & HK49 – 7 Digit Din Standard Hour Meters

72x72mm (cutout 68x68mm) and 96x96mm (cutout 92x92mm) panel mount hours-run meters, IP40 front side



HK48-110VAC		HOUR RUN METER 72mm2 - HK48, 110V 50HZ	\$ 148.10
HK48-230VAC		HOUR RUN METER 72mm2 - HK48, 230V 50HZ	\$ 148.10
HK48-400VAC		HOUR RUN METER 72mm2 - HK48, 400V 50HZ	\$ 148.10
HK49-110VAC		HOUR RUN METER 96mm2 - HK49, 110V 50HZ	\$ 163.90
HK49-230VAC		HOUR RUN METER 96mm2 - HK49, 230V 50HZ	\$ 163.90
HK49-400VAC		HOUR RUN METER 96mm2 - HK49, 400V 50HZ	\$ 163.90

## Programmable Logic Controllers

### Crouzet Millenium 3 Smart Series Controllers

Millenium 3 Smart controllers make the programming of automation control systems as simple as possible. With free downloadable programming software, users can design pr by moving "function blocks" on their PC screen, where the wiring appears automatically, or utilise standard ladder language programming. Standard versions offer 12 or 20 I/O, models are available to allow up to 50 I/O per controller. In addition, with its powerful calendar clock and analogue inputs, Millenium 3 Smart is ideal for building management such as glasshouses, pump or lighting control, heating, ventilation and access control.


### Millenium 3 Smart Series Controllers - Compact

CD12-R-12DC-SMART		M3 SMART SERIES 8IN/4 RELAY OUT 12VDC (88974045)	\$ 568.40
CD12-R-230AC-SMART		M3 SMART SERIES 8IN/4 RELAY OUT 230VAC (88974043)	\$ 527.10
CD12-R-24AC-SMART		M3 SMART SERIES 8IN/4 RELAY OUT 24VAC ( 88974044)	\$ 527.10
CD12-R-24DC-SMART		M3 SMART SERIES 8IN/4 RELAY OUT 24VDC (88974041)	\$ 561.90
CD12-S-24DC-SMART		M3 SMART SERIES 8IN/4 S/S OUT 24VDC (88974042)	\$ 568.40
CD20-R-12DC-SMART		M3 SMART SERIES 12IN/8 RELAY OUT 12VDC (88974055)	\$ 872.50
CD20-R-230AC-SMART		M3 SMART SERIES 12IN/8 RELAY OUT 230VAC	\$ 766.70
CD20-R-24AC-SMART		M3 SMART SERIES 12IN/8 RELAY OUT 24VAC	\$ 766.70
CD20-R-24DC-SMART		M3 SMART SERIES 12IN/8 RELAY OUT 24VDC	\$ 826.30
CD20-S-24DC-SMART		M3 SMART SERIES 12IN/8 S/S OUT 24VDC	\$ 872.50


### Millenium 3 Smart Series Controllers – Expandable

XD10-R-24DC		M3 EXPANDABLE 10 I/O RELAY 24VDC (88970141)	\$ 547.80
XD10-S-24DC-SMART		M3 SMART EXP SERIES 6IN/4 S/S OUT 24VDC ( 88974142)	\$ 642.40
XD26-R-240AC-SMART		M3 SMART EXPANDABLE 26 I/O RELAY 240VAC ( 89974163)	\$ 885.70
XD26-R-24AC-SMART		M3 SMART EXPANDABLE 26 I/O RELAY 24AC ( 88974164)	\$ 885.70
XD26-R-24DC-SMART		M3 SMART EXPANDABLE 26 I/O RELAY 24VDC (88974161)	\$ 885.70
XD26-S-24DC		M3 EXPANDABLE 26 I/O SSR 24VDC ( 88970162)	\$ 769.80
XD26-S-24DC-SMART		M3 SMART EXPANDABLE 26 I/O SSR 24VDC ( 88974162)	\$ 885.70

### Millenium 3 Controllers – Extension Units

XR14-R-12DC		M3 EXPANSION MODULE 14 I/O RELAY 12VDC	\$ 318.30
XR14-R-240AC		M3 EXPANSION MODULE 14 I/O RELAY 240VAC	\$ 318.30
XR14-R-24AC		M3 EXPANSION MODULE 14 I/O RELAY 24VAC	\$ 318.30
XR14-R-24DC		M3 EXPANSION MODULE 14 I/O RELAY 24VDC	\$ 318.30
XE10-240AC		MILLENNIUM 3 SANDWICH EXTENSION 240VAC	\$ 370.10
XE10-24AC		MILLENNIUM 3 SANDWICH EXTENSION 24VAC	\$ 370.10
XE10-R-24DC		MILLENNIUM 3 SANDWICH EXTENSION 24VDC	\$ 370.10
XA04-24DC		MILLENNIUM 3 ANALOGUE EXP MODULE 24VDC	\$ 436.70

### Millenium 3 Controllers – Programming & Comms

M3-MOD		M3 MODEM INTERFACE COMMS MODULE	\$ 575.10
M3-GSM		M3 GSM MODEM	\$ 1,916.80
XN-05		M3 ETHERNET COMMS MODULE 24VDC	\$ 727.10
XN-06		M3 MODBUS COMMS MODULE 24VDC 8 WORD	\$ 561.90
XN-07		M3 MODBUS COMMS MODULE 24VDC RS485-XN06	\$ 601.50


### External Displays for Millenium 3

M3-LED-DISPLAY		LED DISPLAY, 4-DIGIT, 48x24mm, 0-10VDC INPUT, 24VDC AUX	\$ 260.30
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### Millenium 3 Controllers – Accessories

M3/USB-CABLE		MILLENNIUM 3 PC LINK CABLE - USB/M3 (88970109)	\$ 330.50
M3-BLUETOOTH		M3 BLUETOOTH INTERFACE MODULE	\$ 568.40
M3/EEPROM		EEPROM MEMORY MODULE FOR M3 SERIES	\$ 96.20
M3/HMI-CABLE		MILLENNIUM 3 PC LINK CABLE - M3-BARE ENDS	\$ 204.80
M3/NTC3 PROBE		SILICONE NTC PROBE 0-180°C (89750186)	\$ 38.90
M3/PC-LINK		MILLENNIUM 3 PC LINK CABLE - RS232/M3	\$ 375.40
M3/POTENTIOMETER		M2PE 22mm MTG POT FOR MILLENNIUM II+	\$ 131.10
CD12-ADAPTOR		IP67 PANEL MOUNT KIT FOR CD12/XD10	\$ 178.50
CD12-FACEPLATE		FRONT PANEL ADAPTOR FOR CD12/XD10 IP40 (88970809)	\$ 114.30
CD20-ADAPTOR		IP67 PANEL MOUNT KIT FOR CD20/XD26 ( 89750161)	\$ 191.70
CD20-FACEPLATE		FRONT PANEL ADAPTOR FOR CD20/XD26 IP40 (88970810)	\$ 128.80

### Finder OPTA - Programmable Logic Relay

8A.04.024.8300		LOGIC RELAY, LITE, 24VDC, 12 I/O, USB, ETHERNET, MODBUS TCP	\$ 518.70
8A.04.024.8310		LOGIC RELAY, PLUS, 24VDC, 12 I/O, USB, ETHERNET, MODBUS TCP, RS485	\$ 568.80
8A.04.024.8320		LOGIC RELAY, ADVANCED, 24VDC, 12 I/O, USB, ETH, MBUS TCP, RS85, Wi Fi / BLE	\$ 682.60

## Programmable Logic Controllers

### Crouzet EM4 Nano-PLC

The EM4 range nano-PLC from Crouzet is a leading edge range supported by best-in-class tools , enabling the creation and implementation of the smartest automation applications. Offering remote management including stop/start of your application from your phone or PC, event reporting, data logging event alerts by txt or email, and stand-alone applications EM4 is a truly flexible and adaptable solution for any automation requirement.

EM4-AERIAL		
EM4-ALERT-3G	EM4 NANO PLC ALERT 26I/O 3GS 24VDC , BLACK	\$ 2,353.00
EM4-ALERT-STARTER	EM4 NANO PLC ALERT 26I/O 3GS 24VDC , BLACK	\$ 2,353.00
EM4-BLUETOOTH	EM4 ALERT STARTER KIT 3G BLACK	\$ 2,382.30
EM4-BLUETOOTH+USB	EM4 BLUETOOTH INTERFACE MODULE	\$ 144.00
EM4-E10A	EM4 BLUETOOTH INTERFACE MODULE & USB RECEIVER	\$ 183.00
EM4-E10R		
EM4-LOCAL	EM4 NANO PLC LOCAL 26I/O 24VDC BLACK	\$ 1,148.80
EM4-LOCAL-ET	EM4 NANO PLC LOCAL 26I/O 24VDC BLACK	\$ 1,148.80
EM4-LOCAL-ET-EVALKIT	EM4 NANO PLC LOCAL WITH ETHERNET 26I/O 24VDC BLACK	\$ 1,434.30
EM4-LOCAL-ET-KIT	EM4 NANO PLC KIT LOCAL WITH ETHERNET 26I/O 24VDC BLACK	\$ 4,459.20
EM4-MOVBUS	EM4 NANO PLC KIT LOCAL WITH ETHERNET 26I/O 24VDC BLACK	\$ 1,498.20
EM4-USB		



EM4-ALERT



EM4-LOCAL



EM4-USB

### Panasonic PLCs

#### Panasonic FP-0 Series Controllers

FP0RC14RS	FP0 PLC, 8IN/6 RELAY OUTPUT, 24VDC	\$ 575.10
FP0RC14MRS	FP0 PLC, 8IN/6 RELAY OUT, 24VDC, WITH RS485 PORT	\$ 575.10
FP0C32P	FP0 PLC, 16IN/16OUT 24VDC PNP OUTPUT	\$ 961.20
FP0C32T	FP0 PLC, 16IN/16OUT 24VDC NPN OUTPUT	\$ 961.20
FP0C32CT	FP0 PLC, 16IN/16OUT 24VDC NPN w/SERIAL PORT	\$ 1,079.30
FP0E16RS-A	FP0 PLC, EXPANSION UNIT 8IN/8OUT	\$ 575.10
FP0E8RS-A	FP0 PLC, EXPANSION UNIT 4IN/4OUT	\$ 443.60
FP0E32T-A	FP0 PLC, EXPANSION UNIT 16 IN/16 OUT-NPN	\$ 903.70
FP0A21-A	FP0 PLC, ANALOG UNIT 2IN/1OUT	\$ 1,067.90
FP0A80	FP0 PLC, ANALOG UNIT 8 IN	\$ 1,544.40
FP0A04V	FP0 PLC, ANALOG OUTPUT MODULE 4 CHANNELT	\$ 961.20
FP0-8WAY-INTERFACE-N	FP0 PLC PNP INPUT INTERFACE MODULE C/W 1.0m CABLE	\$ 104.00
FP0-8WAY-INTERFACE-P	FP0 PLC PNP INPUT INTERFACE MODULE C/W 1.0m CABLE	\$ 104.00
FP0-16WAY-OP-P	FP0 PLC PNP OUTPUT INTERFACE MODULE C/W 1.0m CABLE	\$ 104.00
FP0-RIBBON-200	200mm 10 WAY RIBBON CABLE FOR FP0-RELAY INTERFACE	\$ 32.10
FP0-RIBBON-500	500mm 10 WAY RIBBON CABLE FOR FP0-RELAY INTERFACE	\$ 32.10
AFP0HC32EP	PLC 16IN/16 PNP OUT, 24VDC, WITH ETHERNET AND RS232 PORT	\$ 1,784.50



FP0-8WAY-INTERFACE

### Crouzet Millenium Slim Logic Controller

CB8R-AC	MILLENIUUM SLIM LOGIC CONTROLLER 4IN/4 RELAY OUT 230VAC 88983903	\$ 299.00
CB8R-DC	MILLENIUUM SLIM LOGIC CONTROLLER 4IN/4 RELAY OUT 24VDC 88983901	\$ 299.00



## Process Indicators, Data Loggers, I/O Modules

### Panel Mounted Process Indicators

Compact microprocessor-controlled display units for monitoring industrial processes, including models that utilise a 22mm hole mounting to fit on almost any panel or switchboard - even a push-button control station. Input options include 0-10V 4-20mA, and RS-485/Modbus. IP65 protection on front panel

AKY-ITP11		PANEL MOUNT DIGITAL GREEN LED DISPLAY 22.5mm, UNIVERSAL 4-20mA INPUT	\$	197.90
AKY-ITP11-G		PANEL MOUNT DIGITAL GREEN LED DISPLAY 22.5mm, UNIVERSAL 4-20mA INPUT	\$	197.90
AKY-ITP14		PANEL MOUNT DIGITAL RED LED DISPLAY 22.5mm, UNIVERSAL 0-10VDC, 4-20mA INPUT	\$	237.90
AKY-ITP14-G		PANEL MOUNT DIGITAL GREEN LED DISPLAY 22.5mm, UNIVERSAL 0-10VDC, 4-20mA INPUT	\$	237.90
AKY-ITP15		PANEL MOUNT BARGRAPH DISPLAY, RED/GREEN LED, 22.5mm, 0-10VDC, 4-20mA INPUT	\$	277.20
AKY-ITP16				
AKY-SM12	AKY-SM12	PANEL MOUNT DIGITAL RED LED DISPLAY 22.5mm, RS485 INPUT	\$	222.10

### Panel Mounted Temperature Indicators

Compact display unit for monitoring temperature, 22mm hole mounting to fit on almost any panel or switchboard - even a push-button control station. Input options thermocouples, RTDs and voltage. Alarm and error indication, adjustable decimal point, NPN output. IP65 protection on front panel.

AKY-ITP16		PANEL MOUNT DIGITAL RED LED, TEMPERATURE DISPLAY- CONTROL 22.5mm, PT100, TYPE K	\$	277.20
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### Data Loggers

Akytec's MSD200 Data Logger offers 4 analogue (0)4-20mA configurable inputs, RS485 interface and Modbus RTU/ASCII communication protocol and can log up to 64 channels. Data is stored on an SD card, integrated USB port. DIN rail mounted 24Vdc powered.

AKY-MSD200		DATA LOGGER 64 CHANNEL 32GB MEMORY, 4 x ANALOG INPUTS	\$	600.60
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### I/O Modules

Akytec's I/O modules offer a cost-effective and flexible solution in distributed automation systems, whether supplementing existing systems or creating new high-performance systems. Modules are DIN rail or wall mounting, support Modbus comms via a serial RS485 port, and are powered by 24Vdc

AKY-MK110-24.8D.4R		DIGITAL I/O MODULE 8DI & 4 DO NPN INPUT	\$	402.90
AKY-MK210-311		I/O MODULE, MODBUS TCP, 6 NPN DIGITAL INPUTS, 8 RELAY OUTPUTS	\$	555.50
AKY-MK210-312		I/O MODULE, MODBUS TCP, 12 NPN/PNP DIGITAL INPUTS, 4 RELAY OUTPUTS	\$	555.50
AKY-MV110-24.16DN		I/O MODULE, 16 x DIGITAL NPN/PNP INPUTS	\$	372.60
AKY-MV110-24.1TD		I/O MODULE, MODBUS/RTU, 1 LOAD CELL INPUT, 24VDC	\$	490.00
AKY-MV110-24.8A		ANALOG INPUT MODULE, 8 x TC-RTD-4-20mA INPUTS	\$	553.90
AKY-MV110-24.8AS		ANALOG INPUT MODULE, 8 x 0-20mA, 0-10V INPUTS	\$	601.80
AKY-MV210-101		I/O MODULE, MODBUS TCP, 8 ANALOG INPUTS, RTD, TC, 4-20mA, 0-1VDC	\$	704.60
AKY-MV210-202		I/O MODULE, MODBUS TCP, 20 NPN/PNP DIGITAL INPUTS	\$	547.10
AKY-MV210-204		I/O MODULE, MODBUS TCP, 20 NPN DIGITAL INPUTS	\$	547.10
AKY-MV210-212		I/O MODULE, MODBUS TCP, 32 NPN/PNP DIGITAL INPUTS	\$	704.60
AKY-MU110-24.8R		I/O MODULE 8 RELAY OUTPUTS	\$	384.00
AKY-MU110-24.6U		I/O MODULE 6 ANALOGUE OUTPUTS 0-10V	\$	582.10
AKY-MU110-24.8I	I/O MODULE 8 ANALOG OUTPUTS 4-20mA	\$	609.80	



## Barcode Readers

### Datalogic Industrial Barcode Readers

Datalogic Industrial Barcode Readers are part of a full range of leading-edge scanning devices developed by Datalogic to cover all markets, including factory automation, healthcare, transportation & logistics and retail sectors. Ongoing development has led to an array of models to suit any imaging application from entry-level scanners to high precision devices for pharmaceutical and healthcare applications. With expert backup from Datalogic's worldwide network behind us, Carrel-Electrade can offer the tools required for the most stringent imaging requirements. Please call for recommendations and pricing.



POWERSCAN PM9500  
HAND-HELD SCANNER



MATRIX 120 FIXED BARCODE READER



MATRIX 220 FIXED BARCODE READER



MATRIX 300N FIXED BARCODE READER

## Camera Vision Systems

### Datalogic Camera Vision System

Machine Learning Assisted Setting. Fast and Easy Setting like standard photosensor. TEACH Button and comprehensive UI with 5 status LEDs 50...150mm operating distance

SMART-VS-MR-5-150-WH



SMART VS VISION SENSOR, 150mm RANGE, WHITE LED INTEGRAL LIGHT

\$ 3,031.90

### P-SERIES SMART CAMERA

P19-937700009	CAMERA, IMPACT P10 GRAYSCALE, 1280x1024 60FPS 1/1.8inch CMOS, OCR	\$ 6,346.70
P17-937700007	CAMERA, IMPACT P17 GRAYSCALE, 1280x1024 120FPS	\$ 10,386.90
P10-937700000	CAMERA, IMPACT P10 GRAYSCALE, 640x480 120FPS	\$ 5,053.10
P16-937700005	CAMERA, IMPACT P16 COLOUR, 1280x1024 120FPS	\$ 8,200.50
P15-937700001	CAMERA, IMPACT P15 GRAYSCALE, 1280x1024 60FPS	\$ 5,911.50



P1X SERIES

P2X SMART CAMERA

The products listed above show a very small selection from the range of cameras and vision systems available from Datalogic. Please contact us for an assessment of your application and appropriate product recommendations.

## Touch Screens/HMIs

### Panasonic HMI Touch Screens

High performance touch operator interface terminals, 64K colours, LED backlight, IP66 (front), 2 ethernet ports, USB and SD card slots, Microsd tWindows CE 6.0 o/s

HM504	HMI TOUCH SCREEN 4 TFT DISPLAY IP66 FRONT*	\$ 1,801.80
HM507	HMI TOUCH SCREEN 7 TFT DISPLAY IP66 FRONT*	\$ 2,402.50
HM510	HMI TOUCH SCREEN 10.4 TFT DISPLAY IP66 FRONT*	\$ 6,403.30
HM513	HMI TOUCH SCREEN 13.4 TFT DISPLAY IP66 FRONT*	\$ 9,811.10
HM500-COMM-PORT	COM PORT ADAPTER FOR HM500 SCREENS	\$ 517.40
AWHS1R043	HMI TOUCH SCREEN 4.3 TFT DISPLAY	\$ 655.21
AWHS1R070	HMI TOUCH SCREEN 7.0 TFT DISPLAY	\$ 942.00
AWHS1R101	HMI TOUCH SCREEN 10.1 TFT DISPLAY	\$ 837.00



## Pro-face

### Human Machine Interface

The PRO-FACE range of human-machine interface products (HMI) is extensive and flexible to allow the best possible application to any factory automation need, and is backed with CEL's years of experience and knowledge. ProFace's leading edge products offer a high level of protocol support, and a global support network assures a commitment to the product. Listed below is but a small representation of the PRO-FACE range. Many other models are available to fill the most demanding HMI application.

For further details of the range, please go to [www.pro-face.com](http://www.pro-face.com) or contact us for specifications, pricing and delivery.



### Touch Operator Interface

High performance user-friendly interface screens for clear, intelligent data and control. Modular models mount through a 22mm hole for ease of installation

PFXGM4201TAD	3.5inch TFT HMI SCREEN 24VDC MODULAR (GP4201-TM)	\$ 1,322.00
PFXGM4301TAD	5.7inch TFT HMI SCREEN 24VDC 22mm MOUNT (GP4301-TM)	\$ 1,659.00
PFXGP4105W1D	3.4inch MONOCHROME (W/P/R) RS232C	\$ 727.10
PFXGP4201TAD	3.5inch TFT HMI SCREEN 24VDC ETHERNET (GP4201-T)	\$ 1,513.50
PFXGP4201TADW	3.5inch TFT HMI SCREEN 24VDC, 2 x SIO, USB A/MiniB x1 (GP4201-TW)	\$ 1,251.60
PFXGP4203TAD	3.5inch TFT HMI SCREEN 24VDC (GP4203-T)	\$ 1,707.50
PFXGP4301TADW	5.7inch TFT HMI SCREEN 24VDC (GP4301-TW)	\$ 2,280.00
PFXGP4303TAD	5.7inch TFT HMI SCREEN 24VDC(GP4303-T)	\$ 3,473.30
PFXGP4401TAD	7.5inch TFT HMI SCREEN 24VDC (GP4401-T)	\$ 3,791.00
PFXGP4401WADW	7.0inch TFT HMI, WIDE SCREEN, ECO MODEL, 24VDC (GP4401WW)	\$ 3,643.10
PFXGP4501TAA	10.4inch TFT HMI ANALOG ETH SD 230VAC(GP4501TAC)	\$ 5,704.80
PFXGP4501TAD	10.4inch TFT HMI ANALOG ETH SD 24VDC (GP4501T)	\$ 5,333.70
PFXGP4501TADW	10.4inch HMI TFT ANALOG 24VDC, ETHERNET (PFXGP4501TADW)	\$ 4,666.60
PFXGP4503TAD	10.4inch TFT HMI ANA ETH SD 24VDC ISOL 485(GP4503T)	\$ 5,927.90
PFXGP4601TAD	12.1inch TFT HMI ANALOG ETH SD 24VDC(GP4601T)	\$ 6,140.00

### SP5000 Smart Portal HMI

PFXSP5500TPD	10.4inch HMI TFT COLOUR DISPLAY, MUST HAVE REAR MODULE(SP5500TP)	\$ 3,842.00
PFXSP5600TPD	12.1inch HMI TFT COLOUR DISPLAY, MUST HAVE REAR MODULE(SP5600TP)	\$ 4,889.90
PFXSP5700TPD	15inch HMI TFT COLOUR DISPLAY, MUST HAVE REAR MODULE(SP5700TP)	\$ 5,455.00
PFXSP5B10	POWER BOX REAR MODULE TO SUIT SP5xxxTP DISPLAYS(SP5B10)	\$ 2,005.90

### Software

#### GP-Pro EX

Programming and editing software. Free trial version available with upgrade to full version on purchase of license

Proface remote HMI -remote monitoring software for mobile & tablets. Download the software from Apple pay and Google Play.

## Human Machine Interfaces

### EXOR Blind HMIs

TPEX EXWARE703	IOT CONTROLLER, SECURE ROUTER, JMOBILE LICENSE, JMCLLOUD LICENSE, INPUT VOLTAGE	\$ 1,755.60
TPEX EXWARE705	IoT controller Ruggedised, secure router, JMobile license, JMcloud license, Input	\$ 2,349.80

### EXOR 700 series HMIs

TPEX EX705	TOUCHSCREEN, PCT 5inch TFT HMI, 16:9 LED 64K, GLASS CAPACITIVE SCREEN	\$ 2,234.90
TPEX EX707	TOUCHSCREEN, GLASS, 7inch TFT 16:9, 800x480, 3x Ethernet 10/100, 2x USB	\$ 3,730.70
TPEX EX710	TOUCHSCREEN, GLASS, 10.1inch TFT 16:9, 1280x800 WXGA, 3x Ethernet 10/100, 2x USB	\$ 4,663.90
TPEX EX715	TOUCHSCREEN, GLASS, 15inch TFT 16:9, 1366x768 WXGA, 3x Ethernet 10/100, 2x USB	\$ 7,189.00
TPEX EX721	TOUCHSCREEN, GLASS, 21.5 inch TFT 16:9, 1920X1080 WXGA, 3x Ethernet 10/100, 2x USB	\$ 10,479.00



### EXOR 700 Harsh Environment HMIs

TPEX EX707G	TOUCHSCREEN, GLASS, 7inch TFT HARSH ENVIRONMENT 3x Ethernet 10/100, 2x USB	\$ 4,807.90
TPEX EX710G	TOUCHSCREEN, GLASS, 10inch TFT HARSH ENVIRONMENT 3x Ethernet 10/100, 2x USB	\$ 5,895.80

### EXOR 700 Series Accessories

TPEX PLCM01	CAN MODULE FOR 500, 600 and eX700	\$ 579.00
TPEX PLCM03	Serial communication module, RS-232	\$ 456.20
TPEX PLCM04	Serial communication module, RS-485 with optical isolation	\$ 553.20
TPEX PLCM09	GSM/GPRS MODEM FOR EXOR EX700 SERIES	\$ 649.10
TPEX PLCM10	4G GSM/GPRS MODEM FOR EXOR EX700 SERIES	\$ 1,024.00
TPEX PLIO03	I/O MODULE, 20DI, 12DO, 8AI, 4AO	\$ 1,875.00
TPEX PLIO06	COMPACT I/O MODULE, 8DI, 6DO, 1 R/O	\$ 598.50

### EXOR JSMART HMIs

TPEX JSMART705	TOUCHSCREEN, PCT, 5inch TFT HMI, POE, 800x480	\$ 2,517.70
TPEX JSMART707	TOUCHSCREEN, PCT, 7inch TFT HMI, POE, 1024x600	\$ 3,781.20
TPEX JSMART707 NFC	TOUCHSCREEN, PCT, 7inch TFT HMI WITH NFC, POE, 1024 x 600	\$ 4,275.60
TPEX JSMART710	TOUCHSCREEN, PCT, 10inch TFT HMI, POE, 1280 x 800	\$ 4,943.10
TPEX JSMART715	TOUCHSCREEN, PCT, 15inch TFT HMI, POE, 1366 x 768	\$ 6,847.00



### EXOR JSMART Accessories

TPEX JSPUOP1	JSmart PoE injector DIN rail mounting	\$ 861.63
TPEX JSBRU001	JSMART 5/7/10INCH TUBE DEVICE BRACKET	\$ 218.70
TPEX JSBRU002	JSMART 15/21INCH TUBE DEVICE BRACKET & WALL BRACKET	\$ 398.66
TPEX JSBRU003	JSMART 5/7/10INCH ADAPTOR BRACKET WITH PLUG	\$ 225.59
TPEX JSBRU007	JSMART 5/7/10INCH GOOSENECK BRACKET C/W 5M CABLE	\$ 506.83

### EXOR Software

TPEX JMSTUDIO 3	EXOR PROGRAMMING SOFTWARE 3 ACTIVATIONS	\$ 739.20
TPEX JMOBILE RUNTIME	JMOBILE PC Runtime Activation licence	\$ 1,099.60
TPEX CODESYS V3 1	1 x CODESYS ACTIVATION LICENCE, V3 RUNTIME	\$ 276.00

## Data Loggers

### ELITEpro™ Recording 1 or 3-Phase Power Meter

The ELITEpro features data logging of kWh, volts, amps, kVA, kvar and power factor for single or three-phase loads. It also offers power quality analysis via harmonics and waveform capture. The ELOG software package is used to program the meter, retrieve, display and analyse recorded data.

#### Features:

Measure single phase or three phase loads, ac or dc voltages  
Measures kWh, volts, amps, kVA, kvar, power factor, harmonic content, 144 different parameters  
USB and standard ethernet ports  
Optional Wi-Fi interface allows remote data collection over wireless networks and real-time values checking via tablet, smartphone or web browser  
May be configured with optional Bluetooth® wireless technology  
4 analogue inputs configurable for voltage or current allows process or environmental data correlation with power data  
Line powered - no need for batteries or external power source  
16MB non-volatile memory allows months of recording time  
User defined recording intervals from 1 s to 24 hrs, Record maximum, minimum, average, instantaneous or all parameters  
Better than 1% accuracy (0.2% typical)



### ELOG™ Software for ELITEpro instruments

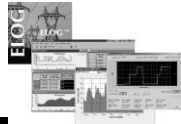
ELOG is the software package that interfaces with the ELITEpro instruments. Everything from setup, real time data display, data analysis, harmonic/waveform capture analysis and automatic data collection is built into this Microsoft Windows™ based software.

ELOG automatically detects what type of instrument it is communicating with and adjusts the appropriate options accordingly. This makes setting up of your equipment even easier. All of the options are fully user configurable and can be turned on or off with just a button click.

Communicates with loggers directly or remotely with the built in modem option. The real time display enables verification of equipment installation as well as quick and easy monitoring of data.

Data analysis is a key function when choosing monitoring equipment. ELOG makes it easy in several ways. Creating graphs, viewing the data in tabular format or exporting to Microsoft Excel™ are all simple tasks.

ELOG makes use of several available graphing functions. The graph types, style, axis titles and all other options are almost limitless. ELOG easily exports the data as an ASCII comma delimited text file for importing into spreadsheets.



### SMARTloggers™ – Time of Use Monitors

The SMARTloggers™ are single channel data loggers designed to monitor the on/off status, time of use and total on time of energy consuming devices or systems. The non-contact monitoring makes installation simple.

The data is stored on board for later retrieval and analysis using SMARTware™ software and your computer.

These four instruments are designed to address the top reasons that monitoring is sometimes skipped - price and complexity.

The LIGHTINGlogger™ monitors lighting usage. The MAGlogger™ monitors motors and similar devices simply by being near the magnetic field. The CTlogger™ comes with a clamp CT (current transformer) to isolate the field you want to monitor.

The CONTACTlogger™ monitors the contacts of an external switch or relay.

#### Features:

Internal sensors or current transformer (CTlogger)  
Display 5 digit LCD showing on status, total on time and percent on  
Time Stamps Month, day, year, hour, minute and second ( one second resolution )  
Data analysis Statistics, summaries, graphs and export using SMARTware™  
Memory 32,000 records, ring memory plus separate on time total  
Communications USB with SMARTlogger comms cable, download 8000 records in less than 7 seconds  
Sensitivity LIGHTINGlogger - adjustable, MAGlogger - 40 mGauss min, CTlogger - 0.25 A min, CONTACTlogger - dry contacts.  
Internal clock Crystal controlled, true calendar, 20ppm accuracy (<1min/month)  
Battery life up to 5 years, user replaceable  
Dimensions 63 x 38 x 19mm, weight 40gm  
Three year warranty



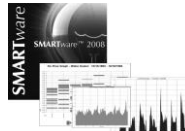
### SMARTware™ Software for SMARTloggers

LIGHTINGlogger, MAGlogger, CTlogger & CONTACTlogger

All SMARTloggers™ use SMARTware™ software that makes it easy to analyse and visually present monitored data. SMARTware has a variety of pre-programmed analysis and graphs, and can also export the data to popular spreadsheets and databases such as Excel® and Access®

#### Features:

USB connection - Download 8000 records of data in less than 7 seconds  
Graphs - Total on-time rate schedule, statistical summaries and time series analysis  
File aggregation - Combine data from multiple readings into a single file  
Exporting - Data file exporting to other popular spreadsheet and database programs  
Import CSV files - Make changes to a data file in Excel then import back into SMARTware for analysis  
Reprogrammable TOU firmware - User upgradeable firmware within SMARTloggers  
Edit raw data - Now data can be edited and unneeded records can be removed  
Auto-launcher - SMARTware automatically starts when the comms cable is connected to the PC  
Compatibility - Windows 2000 and XP  
Backward compatible - Works with all legacy TOU SMARTloggers



## MTL Intrinsically Safe and Control Products

### Intrinsically Safe Barriers

For 30+ years MTL has been a world leader in intrinsic safety (IS) interfaces for hazardous areas, producing barriers, isolators and integrated IS solutions to help prevent explosions in process industries. Ongoing research and development and new industry partnerships are driving MTL into an ever-brighter future of new products and systems.

The clever design includes a D12 bayonet adapter shaft for quick installation, a stainless steel housing that prevents cleaning fluids building up on any surface, and high resistance to cleaning agents and disinfect

Barriers – MTL's compact and inexpensive shunt-diode IS Barriers are the simplest type of IS interface for protecting electrical circuits in hazardous areas. All MTL barriers are mounted and earthed in one operation giving safe installation and the highest reliability for circuit protection. MTL barriers are available in several body types, all with a wide array of input-device options. Universal and custom backplanes are available for easy mounting and installation.

### Intrinsically Safe Barriers 7700 series

#### DIN rail mounted series of I.S shunt diode safety barriers

MTL7706+	1 CH BARRIER 28V +VE 300 OHM	\$ 469.80
MTL7707+	PROTECTED BARRIER SWITCH INPUTS DIN MT	\$ 349.00
MTL7710+	BARRIER 10V+VE 50 OHM	\$ 226.30
MTL7715+	1-CH 12V 119 OHM BARRIER	\$ 226.30
MTL7715P+	1-CH 15V 50 OHM BARRIER	\$ 226.30
MTL7722+	1 CHANNEL BARRIER 22V +VE 150 OHM	\$ 225.30
MTL7728-	28V -VE 300 OHM BARRIER	\$ 226.30
MTL7728+	28V 300 OHM BARRIER	\$ 226.30
MTL7728AC	BARRIER 28VAC 300 OHM	\$ 301.10
MTL7728P+	28V 234ohm DIN RAIL MT BARRIER	\$ 242.60
MTL7729P+	BARRIER 28V +VE 164 OHM IIB GASES	\$ 242.60
MTL7741	SWITCH/PROX INPUT - CHANGEOVER RELAY	\$ 303.00
MTL7742	SW/PROX INPUT OPEN COLLECTOR	\$ 297.20
MTL7743	2 CH SWITCH/PROX INPUTS SPST RELAYS	\$ 454.40
MTL7744	2 CH SWITCH/PROX INPUTS OPEN COLLECTOR	\$ 454.40
MTL7745	SW/PROX INPUT WITH LFD	\$ 482.20
MTL7755AC	2 OR 3 WIRE RTS'S (FLOATING BRIDGE)	\$ 362.40
MTL7756AC	BARRIER RTD'S 3 WIRE	\$ 493.70
MTL7758+	1 CH BARRIER 7.5V +VE 10 OHM	\$ 446.80
MTL7760AC	BARRIER 2 CH THERMOCOUPLE SENSOR	\$ 301.10
MTL7761AC	2 CHANNEL BARRIER 9V +VE 90 OHM	\$ 367.20
MTL7761PAC	2 CHANNEL BARRIER	\$ 372.00
MTL7764+	2 CHANNEL 12v +VE 1 k OHM	\$ 330.80
MTL7764AC	SHUNT DIODE BARRIER 12V 1K OHM	\$ 367.20
MTL7765AC	2 CHANNEL 15V AC 100 OHM	\$ 340.40
MTL7766AC	2 CH 12VAC 150 OHM BARRIER	\$ 367.20
MTL7766PAC	2 CHANNEL BARRIER	\$ 372.00
MTL7767+	2 CHANNEL 15V+VE DIN RAIL MOUNT	\$ 340.40
MTL7778AC	IS BARRIER 24V +VE 650 OHM	\$ 391.20
MTL7787-	2 CHANNEL BARRIER 28V -VE 300 OHM	\$ 309.70
MTL7787+	2 CHANNEL BARRIER 28V +VE 300OHM	\$ 309.70
MTL7787P+	ZENER BARRIER 28V 234 OHM 119mA	\$ 328.90
MTL7788+	2 CH BARRIER 28V +VE 300 OHM	\$ 355.70
MTL7789+	2 CH 28V +VE 650OHM DIODE RETURN	\$ 493.70
MTL778AC	2-CH BARRIER 2WIRE AC/DC SYSTEMS	\$ 440.90
MTL7796-	ZENER BARRIER for VIBRATION PROBE(NEG-V)	\$ 367.20
MTL7796+	ZENER BARRIER FOR VIBRATION PROBES (+VE)	\$ 367.20
MTL7798	POWER FEED MODULE FOR 7700 SERIES	\$ 328.90
MTL7799	DUMMY BARRIER SPARES AND BUS FEED	\$ 168.80



### Accessories

BPL7700	TRIPLE BACK BOX WHITE	\$ 51.60
ISP7000	IMAGE SENSOR 100mm 12/24VDC NPN	\$ 4,290.00
TGL7700	FREQUENCY 45-55Hz, 400V AC	\$ 518.00
TH7700	HOUR METER 48x24mm, NO RESET 240VAC	\$ 73.00
MTL-THR7000	NICKEL PLATED DIN RAIL 1m 7700 SERIES	\$ 88.10
ETL7000	ETHERNET SWITCH 9 PORT	\$ 1,651.00
IMB57	RUBBER RING FOR IX SERIES CAMERA	\$ 13.17
ERB57S	CONTACT BLOCK 1 x NO 1 x NC SNAP ACTION	\$ 130.90
ERB57O	CONTACT BLOCK 1 x NO 1 x NC SNAP ACTION	\$ 130.90
ETM7	THERMISTOR TRIP RELAY AUTO RES 24VAC	\$ 198.26

### Ethernet Communications

MTL have a wide range of communication products for both Hazardous Area installation. These include managed ethernet switches, media converters and WiFi components. A sample selection from their extensive range is listed below.

### PoEx™ Intrinsically Safe GiGa Bit Ethernet

MTL-9471-ETG	I.S. GIGABIT GATEWAY, SERIAL TO ETHERNET II	\$ 9,935.00
MTL-9476-ETG	I.S. GIGABIT ETHERNET SWITCH, 6 PORT MANAGED	\$ 12,065.00
MTL-9478-ETG	I.S. GIGABIT ETHERNET ISOLATOR IIB	\$ 13,201.00
MTL-9479-ETG-CSL	I.S. GIGABIT ETHERNET WLAN AP/BRIDGE 11B	\$ 13,201.00
MTL-9459-ETPLUS-SS	MTL RUGICAM IP CAMERA, SS ENCLOSURE	\$ 14,266.00
MTL9409-ET5	MTL CAMERA ETHERNET CAT6a CABLE, 5M. M12/8P - RJ45	\$ 348.41
MTL9409-PWR5	MTL CAMERA ETHERNET CAT6a CABLE, 5M. M12/8P - RJ45	\$ 348.41
MTL-9492-PS-PLUS	MTL I.S. POWER SUPPLY, Ex ia/ib IIB, 300mA, 12.8VDC OUTPUT	\$ 14,266.00

## MTL Intrinsically Safe and Control Products

### Isolators –

MTL Isolators, an alternative to barriers, need no high-integrity earthing and can provide signal amplification and relay options, while their hazardous/safe-area isolation allows each to be earthed at any convenient point, simplifying installation and avoiding earth-loop problems. Universal and custom backplanes are available for easy mounting and installation.

### Intrinsically Safe Isolators 5500 series

MTL5510	4 CH DIGITAL INPUT S/S	\$ 815.80
MTL5510B	4 CH MULTIFUNCTION DIGITAL INPUT S/S	\$ 1,037.30
MTL5511	1 CH DIG IN - RELAY OUTPUT + LFD	\$ 367.20
MTL5513	2 CH DI SS OUTPUT	\$ 529.20
MTL5514	1 CH DI C/O RELAY OUTPUT +LFD	\$ 529.20
MTL5514D	1-CH SWITCH/PROX RELAY DUAL RELAY OUTPUT	\$ 529.20
MTL5516C	PROX/SWITCH RELAY 2 INPUTS	\$ 529.20
MTL5517	2 CH DI RELAY OUTPUT + LFD ALARM	\$ 650.90
MTL5521	SOLENOID/ALARM DRIVER	\$ 446.80
MTL5522	SOLENOID ALARM/DRIVER LOOP POWER	\$ 489.90
MTL5523	SOLENOID /ALARM DRIVER + LFD	\$ 650.90
MTL5524	SOLENOID ALARM DRIVER 1 CHANNEL	\$ 587.70
MTL5525	SOLENOID/ALARM DRIVER, SW CNTR +OVR	\$ 489.90
MTL5526	2CH LOOP PWRD/SWITCED I.S. RELAY	\$ 668.20
MTL5531	1CH VIBRATION TXDUCER I/F	\$ 897.30
MTL5532	PULSE ISOLATOR TO PULSE AND ANALOG	\$ 849.40
MTL5541	1 CH SMART XMTR REPEATER 4-20mA	\$ 758.30
MTL5541-A	1CH REPEATER PS 4-20mA PASSIVE INPUT	\$ 808.00
MTL5541-S	1 CH REPEATER POWER SUPPLY 4-20mA PASSIV	\$ 808.00
MTL5544	2 CH REPEATER POWER SUPPLY 4-20mA ACTIVE	\$ 1,183.00
MTL5544-A	2CH REPEATER PS 4-20mA PASSIV INPUT	\$ 1,179.30
MTL5544-D	REPEATER POWER SUPPLY 1 CH IN 2CH OUT	\$ 927.50
MTL5544-S	2 CH REPEATER POWER SUPPLY 4-20mA PASSIV	\$ 1,227.80
MTL5546	1 CH SMART 4-20mA ISO DRIVER + LFD	\$ 773.60
MTL5546Y	1 CH SMART 4-20mA ISO DRIVER + o/c LFD	\$ 773.60
MTL5549	2 CH SMART 4-20mA ISO DRIVER + LFD	\$ 1,183.00
MTL5553	DATA HIGHWAY ISOLATOR FOR MTL830 MUX	\$ 1,173.50
MTL5561	2 CH FIRE/SMOKE DETECTOR	\$ 792.80
MTL5573	1 CH TEMP CONVERT T/C & RTD-SETUP NO ALARM	\$ 970.20
MTL5575	1 CH TEMP CONVERT T/C and RTD-SETUP	\$ 1,088.10
MTL5576-RTD	2 CH RTD CONVERTER TO 4-20MA	\$ 1,489.70
MTL5576-THC	2 CH THC CONVERTER TO 4-20MA	\$ 1,615.30
MTL5581	mV ISOLATOR FOR LOW-LEVEL SIGNALS	\$ 733.30
MTL5582B	ISOLATOR FOR RTD TO RTD	\$ 862.80
MTL5595-PS	FIELD-BUS PSU (OBSOLETE use F10X-PS)	\$ 1,208.50
MTL5521-11-24	SOLENOID/ALARM DRIVER	\$ 446.80
MTL5531-111LI	1CH VIBRATION TXDUCER I/F	\$ 897.30
MTL5531-115L	1CH VIBRATION TXDUCER I/F	\$ 897.30
MTL5536-11LU	PULSE ISOLATOR TO PULSE AND ANALOG	\$ 849.40



### I.S. Digital Indicators and Displays

MTL661	3.5 DIGIT IS INDICATOR - FIELD MOUNT	\$ 2,305.50
MTL661-B	3.5 DIGIT IS INDI-FIELD MNT-BK LGT	\$ 2,494.00
MTL662	3.5 DIGIT IS INDICATOR - PANEL MOUNT	\$ 2,174.60
MTL663	DIGITAL INDICATOR 4-20mA LOOP POWERED	\$ 2,174.60
MTL663-B	DIGITAL INDICATOR 4-20mA LOOP POWERED C/W BACKLIGHT	\$ 2,375.60
MTL665	DIGITAL INDICATOR 4-20mA LOOP POWERED, DIN PANEL MOUNT	\$ 2,174.60
MTL677	SWITCH STATUS IS INDICATOR	\$ 94.70
MTL661-ABS	3.5 DIGIT IS INDICATOR - FIELD MOUNT	\$ 2,305.50
MTL665B	DIGITAL INDICATOR 4-20mA LOOP POWERED, DIN PANEL MOUNT	\$ 2,174.60
PMA66	POWERSCAN PM9501 HANDHELD 1D/2D INDUSTRIAL SCANNER - STANDARD RANGE	\$ 2,639.20
MTL647	I.S. TEXT - GRAPHICS DISPLAY	\$ 3,153.20
MTL646	I.S. TEXT - GRAPHICS DISPLAY	\$ 3,153.20
PIP66	ULTRASONIC SENSOR, M18/250mm, 10-30VDC, PNP NO, M12	\$ 647.60
PIP66-ABS	ULTRASONIC SENSOR, M18/250mm, 10-30VDC, PNP NO, M12	\$ 647.60
GAS66	SHUNT 10A-60mV	\$ 98.90
GAS660	SHUNT 10A-60mV	\$ 98.90





## MTL Control Products, Surge Protection

### Communications –

MTL have a wide range of communication products for both Hazardous and Safe Area installation. These include managed and unmanaged ethernet switches, media converters and RF I/O components. A sample selection from their extensive range is listed below.

### PoEx™ Intrinsicly Safe GiGa Bit Ethernet

MTL9471-ETG	INTRINSICALLY SAFE ETHERNET ISOLATOR	\$ 4,524.10
MTL9475-ETG	I.S. GIGABIT GATEWAY, SERIAL TO ETHERNET II	\$ 9,935.00
MTL9476-ETG	I.S. GIGABIT GATEWAY, SERIAL TO ETHERNET II	\$ 9,935.00
MTL9479-ETG	I.S. GIGABIT ETHERNET ISOLATOR IIB	\$ 13,201.00
MTL-9478-ETG	I.S. GIGABIT ETHERNET ISOLATOR IIB	\$ 13,201.00

For Intrinsicly Safe options please contact us.

### Surge Protection Devices

#### Type-II Power Protection Devices

MTL-ZD16108	ZONE DEFENDER PRO 80KA 415V 3PH 4W	\$ 563.70
MTL-ZD16208	ZONE DEFENDER SURGE 100KA 240/415V 3PH 4WIRE	\$ 919.40
MTL-ZD16408	ZONE DEFENDER PRO 160KA 415V 3PH 4W	\$ 1,607.60

Other sizes on request are available.

#### 24VDC Power Protection Device

MTL-ZD14624	SURGE PROTECTOR, ZONE DEFENDER2, 24VDC 36ka, SURFACE MOUNT	\$ 455.70
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### MA Series AC Power Protection Devices

MA Series Surge Protection Devices are designed to provide immediate local protection against surges and electrical noise. As they are DIN rail mounted, they can be easily placed right beside individual items of electrical equipment.

MTL-MA05/D-2	AC POWER LINE PROTECTOR, 240VAC 5A 6.6KA, DIN MOUNT	\$ 186.00
MTL-MA10/D-2	AC POWER LINE PROTECTOR, 240VAC 10A 6.6KA, DIN MOUNT	\$ 213.80
MTL-MA15/D1/S1	AC POWER LINE PROTECTOR, 120VAC 15A 12KA, DIN MOUNT	\$ 287.60
MTL-MA15/D2/S1	AC POWER LINE PROTECTOR, 240VAC 15A 12KA, DIN MOUNT	\$ 287.60
MTL-MA30/D2/S1	AC POWER LINE PROTECTOR, 240VAC 30A 18KA, DIN MOUNT	\$ 594.00

### SDM Series Data & Signal Protection Devices

MTL-SD32MXX-BDN	MODULAR SPD 32V NO LINE DISC, NO FUSE&LED, NO EARTH ISOL	\$ 167.50
MTL-SD32MXL-BDN	SPD PLUG & BASE 32V, LED, NO FUSE, DIRECT EARTH CON	\$ 162.00
MTL-SD32MFX-BDN	MODULAR SPD 32V,250mA FUSE, NO LED, NO EARTH ISOL	\$ 168.65
MTL-SD32MDX-BDN	MODULAR SPD 32V, LINK DISCONNECT, NO LED, NO EARTH ISOL	\$ 168.65
MTL-SD32MXX-HC-BCN	MODULAR SPD COMPLETE HIGH CURRENT 4A, NON SIG.DISCON	\$ 189.50

Replacement plug-in modules and bases are available, please contact us for P&A.

### TP48 Series Data & Signal Protection Devices

TP48 data and signal protection units safeguard field-mounted process transmitters right at the unit. The TP48 simply screws into a conduit entry with no additional modification required.

MTL-TP48-I	SURGE PROTECTION UNIT 20mm ISO THREAD	\$ 151.00
MTL-TP-48-I-NDI	SURGE PROTECTION UNIT 20mm ISO THREAD CERTIFIED	\$ 179.80
MTL-TP48-N	SURGE PROTECTION UNIT 1/2inch NPT THREAD	\$ 151.00

## Carrel Timber Moisture Meters

### C901 Resistance Type Timber Moisture Meter

Self contained hand held resistance type instrument with provision for connection to a separate electrode  
Supplied complete with heavy duty carrying case with belt loop

Reliable and easy to use

Specifications:

Range	8% to 40% moisture content
Operation	Single push button
Calibration ref	AS/NZS 1080.1:1997
Battery monitor	Automatic LED indicator
Electrodes	Built-in needle type + connection for separate external unit
Battery	1 x 9V heavy duty, IEC 6F22
Dimensions	165 x 80 x 40 mm
Weight	225g



Stock range

**C901** MOISTURE METER, ANALOGUE, WITH VINYL CASE, 8-40% RANGE

\$ 539.30

### C400 Digital Resistive Timber Moisture Meter

An affordable digital resistance type moisture meter suitable for timber handlers, inspectors, tradesmen and home owners.

This instrument is simple to use and is also capable of correcting readings for temperature and common NZ building timbers. Model C400-SR has selectable corrections for most common NZ and Australian timbers and can record up to 170 readings in non-volatile EEPROM memory. Stored data is downloaded via an RS232 serial port in either MContentR kiln management format or comma separated variable (CSV) format for importing into spreadsheets.

Self contained digital hand held resistance type instrument

Range: 10% to 100%

Reliable and easy to use

Sealed water resistant case

Long battery life, low battery indicator

Ambient temperature measurement on built in sensor

Automatic temperature correction of reading (selectable)

Scales for Standard, UT Radiata pine, H1 and H3 timbers

Optional external temperature probe

Supplied with either:

Built in 18mm pin electrodes model C400-P or BNC connector for external slide hammer electrode models C400-S & C400-SR

Specifications:

Optimum accuracy	13% to 40% moisture content
Calibration ref	AS/NZS 1080.1:1997
Battery	1 x 9V heavy duty, IEC 6F22
Dimensions	130 x 67 x 25mm
Weight	160g



Stock Range

<b>C400-P</b>	DIGITAL MOISTURE METER, 12mm PINS, 10-100% CONTENT	\$ 298.80
<b>C400-S</b>	DIGITAL MOISTURE METER, BNC SOCKET, 10-100% CONTENT	\$ 298.80
<b>C400-SR-CSV</b>	DIGITAL STORAGE MOISTURE METER WITH DOWNLOAD LEAD	\$ 523.50
<b>C400-SR-LEAD</b>	DOWN LOAD LEAD FOR C400-SR	\$ 37.00
<b>C400-TEMP-PROBE</b>	TEMPERATURE PROBE FOR C400 METER	\$ 132.20

### C301 Capacitive-Type Timber Moisture Meter

Self contained hand held capacitive type instrument with digital readout

Non invasive, no external electrodes

Continuous operation enabling large areas to be rapidly checked

Specifications:

Range	0 to 200% moisture content
Material	Radiata pine, dry density 0.46 Tonnes/cub m
Display	4 digit LCD
Battery monitor	Digital display "Lo-b"
Battery	1 x 9V heavy duty, IEC 6F22
Dimensions	145 x 85 x 40mm
Weight	225g



Stock range

**C301** DIGITAL CAPACITIVE MOISTURE METER, 4 DIGIT DISPLAY

\$ 495.80

### Timber Moisture Meter Kits & Cases

Moisture meters packaged with hard shell case and a choice of accessories for safe and convenient transport and storage of our range of timber moisture meters and accessories. Kits include a calibration test card (except C301-HC)

Stock Range

<b>C301-HC</b>	DIGITAL CAPACITIVE MOISTURE METER, 4 DIGIT DISPLAY, WITH HARD CARRY CASE	\$ 575.10
<b>C400-P-HC</b>	DIGITAL MOISTURE METER, 12mm PINS, 10-100% CONTENT, WITH HARD CARRY CASE	\$ 475.30
<b>C400-S-SH-HC</b>	DIGITAL MOISTURE METER, BNC SOCKET, 10-100% CONTENT, SLIDE HAMMER+HARD CASE	\$ 895.30
<b>C400-SR-CSV-SH-HC</b>	DIGITAL STORAGE MOISTURE METER WITH DOWNLOAD LEAD+ SLIDING HAMMER+H/CASE	\$ 1,011.30
<b>C901-HC</b>	MOISTURE METER, ANALOGUE, WITH HARD CARRY CASE, 8-40% RANGE	\$ 720.50
<b>C901-HC</b>	MOISTURE METER, ANALOGUE, WITH HARD CARRY CASE, 8-40% RANGE	\$ 720.50
<b>C901-SH-HC</b>	MOISTURE METER, ANALOGUE, 8-40% RANGE, SLIDE HAMMER + HARD CARRY CASE	\$ 1,107.60
<b>MM-HARD CASE</b>	CARRY CASE FOR TIMBER MOISTURE METERS	\$ 99.20



### DampTester & WoodTester Moisture Indicators

Compact self contained hand held moisture testers. DampTester measures moisture in wood, wallboard or plaster.

Tests to levels recommended by wallboard manufacturers.

Measurements in wood based on standard AS/NZS1080 for H1 radiatapine.

Three LED indicators:

green = dry ( below 16% moisture )  
yellow = damp ( 16% to 20% moisture )  
red = wet ( above 20% moisture )

WoodTester measures moisture in firewood.

Three LED indicators:

green = dry ( below 20% moisture )  
yellow = damp ( 20% to 24% moisture )  
red = wet ( above 24% moisture )

Specifications

Battery	1 x 9V heavy duty, IEC 6F22
Dimensions	110 x 60 x 30mm
Weight	90g



Stock range

<b>DAMPTESTER</b>	TIMBER MOISTURE INDICATOR	\$ 148.10
<b>WOODTESTER</b>	TIMBER MOISTURE INDICATOR	\$ 148.10

## Carrel Timber Moisture Meter Accessories

### CH101 Hammer Electrode

For use with timber moisture meters C901 and C400  
Suitable for rough sawn timber stacked ready for use or job selection.

Weight 711g



**Stock range**  
CH101 HAMMER ELECTRODE WITH HARDENED TRIANGULAR TIP \$ 509.00

### CSH102 Sliding Hammer

Uses Teflon insulated needles for gradient readings to a depth of 45mm

Weight 1.5Kg



**Stock Range**  
CSH102 SLIDING HAMMER ELECTRODE USED WITH C90 \$ 510.50

### Calibration Test Card

For checking resistance type timber moisture meter calibration.

Place the electrode needles or blades across the test pads, operate meter and compare reading with the figures shown between test pads

Two ranges 13% and 24%  
Cal. ref AS/NZS1080. 1:2012  
Dimensions 56 x 76 x 5mm  
Weight 36g



**Stock range**  
MM-TEST-CARD CALIBRATED TEST CARD FOR TIMBER MOISTURE METERS \$ 97.80

### Calibration services

Standard tests for compliance with AS/NZS 1080. 1:1997 including issue of traceability certificate.  
Brands other than Carrel Electrade calibrated at our discretion

#### Calibration services

MM-TEST-CERTIFICATE1 ISSUED AT TIME OF REPAIR OR CALIBRATION OF MOISTUREMETER \$ 28.20  
MM-TEST-CERTIFICATE2 ISSUED FROM CEL WORKSHOP \$ 59.60

### Spare parts


**Stock range**  
BLADES CH101 ELECTRODE BLADES \$ 33.10  
NEEDLES NEEDLES FOR C901 ELECTRODE \$ 0.60  
PROBES-60MM INSULATED 60mm PROBE FOR CSH102 SLIDING HAMMER \$ 26.40  
PROBES-45MM INSULATED 45mm PROBE FOR CSH102 SLIDING HAMMER \$ 26.40

## Extractor Fans

### Vortice Extractor Fans

For Domestic & Commercial use

#### Punto range axial fans, auto shutters, long-life (30,000 hours) ball bearing motors for continuous operation. Splashproof IPX4 protected

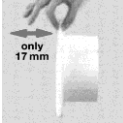
VM100/4A		FAN AUTO SHUTTERS 100mm 90cm/hr (11222)	\$	191.00
VM100/4AT		FAN AUTO SHUTTERS, TIMER, 100mm 90cm/hr	\$	230.60
VM120/5A		FAN AUTO SHUTTERS 120mm 175cm/hr (11322)	\$	199.40
VM120/5AT		FAN AUTO SHUTTERS, TIMER, 120mm 175cm/hr (11332)	\$	252.40
VM150/6A		FAN AUTO SHUTTERS 150mm 335cm/hr (11422)	\$	301.00
VM150/6AT		FAN AUTO SHUTTERS, TIMER, 150mm 335cm/hr	\$	359.30

#### Punto 100mm (4) 12Vac fan

With brass-bushed motors, for use in bathrooms, toilets, caravans, etc


VM100/4A-12V		WALL-WINDOW FAN AUTO SHUTTERS, 12VAC (11223)	\$	140.50
VM100/4A-12V-MTR		MOTOR FOR M100/4A 12V FAN	\$	110.50
VM100/4A-12VPS		POWER SUPPLY for VM100/4 12volt FAN	\$	107.00
VM100/4A-12VPST		POWER SUPPLY (with TIMER) for 12volt FAN	\$	144.50
VM100/4A-FRONT		FRONT GRILLE FOR M100/4A FAN	\$	66.30

#### Punto Filo range axial fans, long-life (30,000 hours) ball bearing motors for continuous operation. Built-in backdraught shutter, splashproof IPX4 protected

VMF100/4		SLIM-LINE FAN, 100mm, 85cm/hr (11131)	\$	131.10
VMF100/4T		SLIM-LINE FAN, W/TIMER, 100mm, 85cm/hr (11135)	\$	172.70
VMF120/5		SLIM-LINE FAN, 120mm, 175cm/hr (11132)	\$	139.50
VMF120/5T		SLIM-LINE FAN, W/TIMER, 120mm, 175cm/hr (11136)	\$	172.70
VMF150/6		SLIM-LINE FAN, 150mm, 335cm/hr (11133)	\$	219.70
VMF150/6T		SLIM-LINE FAN, W/TIMER, 150mm, 335cm/hr (11137)	\$	246.80

#### Window and ceiling mounting kits for "Punto" range fans.

Allows installation of any "Punto" model fan in single and double glazed windows or ceilings


VMF100-KIT		CEILING KIT for 100mm SLIM-LINE FAN (22162)	\$	7.90
VMF120-KIT		CEILING KIT for 120mm SLIM-LINE FAN (22163)	\$	7.90
VMF150-KIT		CEILING KIT for 150mm SLIM-LINE FAN (22164)	\$	7.90
VF100/4		WINDOW MOUNT KIT FOR VM100/4A FAN (22131)	\$	25.40
VF120/5		WINDOW MOUNT KIT FOR VM120/5A FAN (22132)	\$	39.30
VF150/6		WINDOW MOUNT KIT FOR VM150/6A FAN (22133)	\$	41.40
VS100/4		CEILING KIT for M100/4A FAN (22154)	\$	18.10
VS120/5		CEILING KIT for M120/5A FAN (22155)	\$	21.70
VS150/6		CEILING KIT for M150/6A FAN (22156)	\$	24.00
VGRILLE-100		100mm GRILLE for PUNTO & GHOST FAN (22140)	\$	32.70
VGRILLE-120		120mm GRILLE for PUNTO & GHOST FAN (22141)	\$	35.60
VGRILLE-150		150mm GRILLE for PUNTO & GHOST FAN (22142)	\$	37.90

#### Vario range axial fans, long-life (30,000 hours) ball bearing motors for continuous operation. Splashproof IPX4 protected


V150/6M		VARIO FAN 150mm, PULL CORD 380cuM/h (12614)	\$	165.20
V150/6		VARIO WALL/WINDOW FAN, 150mm AUTO SHUTTER, REVERSIBLE 380cuM/hr (12615)	\$	256.30
V230/9		VARIO WALL-WINDOW FAN 230mm, REVERSIBLE, 700cuM/hr (12455)	\$	499.20
V230/9M		230mm VARIO FAN LL PULL CORD 700cuM/hr (12454)	\$	372.50
V300/12		VARIO WALL-WINDOW FAN 300mm, REVERSIBLE, 1650cuM/hr (12415)	\$	703.20
VKIT-TE-150/6		ROOF MOUNTING KIT FOR VARIO 150/6 FAN	\$	117.30
VKIT-TE-230/9		ROOF MOUNTING KIT FOR VARIO 230/9 FAN	\$	152.80
VKIT-TE-300/12		ROOF MOUNTING KIT FOR VARIO 300/12 FAN	\$	244.50
VKIT-SO		CEILING KIT for V150/6, V230/9 FAN	\$	80.60
VKIT-SO-300/12		CEILING KIT for V300/12 FAN	\$	166.60
VKIT-MU		WALL MOUNTING KIT for VARIO FAN 13018	\$	36.40
VKIT-SA-230/9		DARKROOM COWL for VARIO 230/9 FAN	\$	490.10

## Extractor Fans

### Punto Ghost range in-line axial fans, long-life (30,000 hours) ball bearing motors for continuous operation

VMG100/4	 PUNTO Ghost Fan	PUNTO GHOST FAN 100mm 80cuM/hr capacity	\$	106.80
VMG120/5		PUNTO GHOST FAN 120mm 160cuM/hr capacity	\$	107.10
VMG150/6		PUNTO GHOST FAN 150mm 320cuM/hr capacity (11104)	\$	183.70
VMGK100/4		IN-LINE FAN KIT 100mm c/w DUCT & GRILLES	\$	137.20
VMGK100/4-T		IN-LINE FAN KIT 100mm, with TIMER c/w DUCT & GRILLES	\$	148.10
VGHOST-BRKT-100		MTG BRACKET for 100mm GHOST FAN (22259)	\$	16.70
VGHOST-BRKT-120		MTG BRACKET for 120mm GHOST FAN (22260)	\$	16.70
VGHOST-BRKT-150		MTG BRACKET for 150mm GHOST FAN (22261)	\$	27.40


### Centrifugal in-line duct fans, domestic & commercial

VCA100-MD	 CA In-Line Fan	IN-LINE DUCT FAN DUAL SPD 220/340cuM/hr	\$	310.20
VCA150-MD		IN-LINE DUCT FAN DUAL SPD 570/770cuM/hr (16153)	\$	441.80
VCA200-MD		IN-LINE DUCT FAN DUAL SPD 820/1050cuM/hr	\$	482.90
VCA250-MD		IN-LINE DUCT FAN DUAL SPD 950/1300cuM/hr	\$	741.50
VCA315-MD		IN-LINE DUCT FAN DUAL SPD 1350/1800cuM/h	\$	905.90
VCA100-WALL		WALL MOUNT DUCT FAN 290cuM/hr	\$	370.10
VCA150-WALL		WALL MOUNT DUCT FAN 406cuM/hr	\$	444.20
VCA200-WALL		WALL MOUNT DUCT FAN 950cuM/hr	\$	588.70

### Lineo mixed-flow in-line duct fans, domestic & commercial


VMF100/4	SLIM-LINE FAN, 100mm, 85cm/hr (11131)	\$	131.10
VMF100/4T	SLIM-LINE FAN, W/TIMER, 100mm, 85cm/hr (11135)	\$	172.70
VMF120/5	SLIM-LINE FAN, 120mm, 175cm/hr (11132)	\$	139.50
VMF120/5T	SLIM-LINE FAN, W/TIMER, 120mm, 175cm/hr (11136)	\$	172.70
VMF150/6	SLIM-LINE FAN, 150mm, 335cm/hr (11133)	\$	219.70
VMF150/6T	SLIM-LINE FAN, W/TIMER, 150mm, 335cm/hr (11137)	\$	246.80

### Lineo mixed-flow in-line duct fans, domestic & commercial

VLINEO100-QVO	 CA-WALL Fan	IN LINE MIXED FLOW EXTRACT FAN 200cuM/hr (17005)	\$	231.70
VLINEO100-VO		IN LINE MIXED FLOW EXTRACT FAN 255cuM/hr (17144)	\$	285.40
VLINEO100-VO-T		IN LINE EXTRACT FAN with TIMER 255cuM/hr	\$	294.30
VLINEO125-VO		IN LINE MIXED FLOW EXTRACT FAN 365cuM/hr (17145)	\$	306.40
VLINEO125-VO-T		IN LINE EXTRACT FAN with TIMER 365cuM/hr (17022)	\$	303.90
VLINEO150-VO		IN LINE MIXED FLOW EXTRACT FAN 550cuM/hr (17146)	\$	372.30
VLINEO150-VO-T		IN LINE EXTRACT FAN with TIMER 550cuM/hr	\$	389.00
VLINEO200-VO		IN LINE MIXED FLOW EXTRACT FAN 1060cuM/h (17180)	\$	412.90
VLINEO200-VO-T		IN LINE EXTRACT FAN with TIMER 1060cuM/hr	\$	423.00
VLINEO250-VO		IN LINE MIXED FLOW EXTRACT FAN 1350cuM/h (17181)	\$	603.60
VLINEO315-VO	IN LINE MIXED FLOW EXTRACT FAN 2300cuM/h (17182)	\$	878.60	


## Heating & Hygiene Products

### Hand Dryer

VOPTIMAL-DRY-A		AUTOMATIC HAND DRYER 2KW (19229)	\$	454.70
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### Infra-Red Heating

Vortice Thermologica infra-red heaters offer 3 heat settings (600/1200/1800W) via a pull-cord switch, suitable for bathrooms, workshops or commercial premises.

VTHERM		THERMOLOGIKA WALL MTD HEATER (70015)	\$	239.20
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## Generator & Marine Controls



### Gen-Set Controllers

DKG-114		REMOTE STOP/START CONTROL 9-30VDC	\$ 381.30
DKG-116		REMOTE STOP/START CONTROL 9-30VDC	\$ 390.00
DKG-215		GENSET CONTROL, MANUAL AND REMOTE START UNIT, 96x96mm	\$ 370.10
DKG-215-P-CABLE		MINI USB - RS232 PROGRAMME CABLE FOR DKG215	\$ 132.20
DKG-519		GENSET CONTROL MANUAL & REMOTE START UNIT, 200x148mm	\$ 1,288.90
DKG-105		AUTOMATIC MAINS FAIL GENSET CONTROLLER, 72x72mm	\$ 236.30
DKG-225		AUTOMATIC MAINS FAIL CONTROL WITH BATTERY CHARGER, 133x107mm	\$ 508.20
DKG-705		AUTOMATIC MAINS FAIL CONTROL WITH PARALLELING, 192x144mm	\$ 1,475.70
D500-GPRS-COMM		ADVANCED GENSET CONTROL WITH GSM MODEM AND COMMS, PANEL MOUNT 200x148mm	\$ 1,660.20

### Automatic Transfer Switches


DKG-171		AUTOMATIC TRANSFER SWITCH, PANEL MOUNT 72x72mm	\$ 290.20
DKG-173		AUTOMATIC TRANSFER SWITCH, DIN RAIL MOUNT	\$ 276.30
DKG-329		AUTOMATIC TRANSFER SWITCH WITH SYNC CHECK, PANEL MOUNT 172x134mm	\$ 667.60

### Voltage Regulators & Battery Chargers

AVR-12		ALTERNATOR VOLTAGE REGULATOR, 0-115VDC @230VAC, 0-10A	\$ 284.30
AVR-20		ALTERNATOR VOLTAGE REGULATOR, 0-115VDC @230VAC, 0-20A	\$ 310.70
BC125-M		BATTERY CHARGER SWITCH MODE, 170-300VAC INPUT, 12V 5A OUTPUT	\$ 158.60
BC245-M		BATTERY CHARGER SWITCH MODE, 170-300VAC INPUT, 24V 5A OUTPUT	\$ 185.10
SMPS-123		BATTERY CHARGER SWITCH MODE, 170-300VAC INPUT, 12 V 3A OUTPUT	\$ 130.90
SMPS-243		BATTERY CHARGER SWITCH MODE, 170-300VAC INPUT, 24V 3A OUTPUT	\$ 185.10

### Panel Mounted Digital Multimeters

These state-of-the-art panel meters are designed for accurate measurement of the AC RMS voltage, AC RMS current, frequency, with user-selectable CT ratios

DM-0101-72		DIGITAL MULTIMETER 72x72mm, 1 PHASE, 170-275VAC, SINGLE LINE DISPLAY	\$ 244.60
DM-0301		DIGITAL MULTIMETER, 72x72mm, 1 PHASE, 170-275VAC, 3 LINE DISPLAY	\$ 244.60
DA-0303		DIGITAL AMMETER 72x72mm, 3 PHASE, 5A CT, 170-275VAC AUX	\$ 124.60
DKM-401		DIGITAL MULTIMETER, 96x96mm, 3 PHASE, AMPS-VOLTS-HZ, 5A CT, 400VAC	\$ 197.70
DKM-405		DIGITAL MULTIMETER, 96x96mm, 3 PHASE, AMPS-VOLTS-HZ, MDI, 5A CT, 400VAC,	\$ 215.00

## Warranty Repair Policy

To remove any confusion and embarrassment for all parties, we would like to clarify our position regarding the warranty repair or replacement of products returned to our warehouses.

It is at our discretion whether we repair or replace any item returned as faulty under warranty

**We do not require or use GRA numbers.**  
**Information required with item returned is:**

**Proof of purchase.** The *original Packing Slip/Invoice number* is sufficient. Without this information the request will go no further.

**Details of the nature of the problem with the product.** This will help speed up the assessment of the claim.

If possible, a description of the application so that suitability for purpose can be assessed.

We have an in-house workshop with qualified technicians able to inspect, assess and test items returned. Depending on the customer requirements the following will apply:

*If a replacement is required immediately, a Purchase Order number must be supplied to cover the replacement item.*

The returned item will be assessed by our technician and evaluated as either faulty or damaged. If the item is faulty, it will be repaired, replaced or credited by mutual agreement.

If the item is not faulty but damaged, the customer will be contacted and asked whether the item is to be repaired at customer cost or returned as is. If the item is to be repaired, a Purchase Order number must be supplied to cover the repair. The item will then be repaired and returned accompanied by a packing slip detailing the technician's findings, the work undertaken and the costs involved.

If any application or major performance problems are found, the area representative should be called to directly assess any issues.

## Product Safety Declaration

Carrel-Electrade Ltd hereby certify that all products sold by them meet the safety requirements of the Electricity (Safety) Regulations 2010. In particular we certify that all products meet the requirements of clause 80 of these regulations which requires all fittings and appliances to be electrically safe.

In addition to the above, under clause 83 of the regulations there is a requirement for 'declared medium risk articles' not to be sold unless the supplier has made a 'Supplier Declaration of Conformity' (SDoC). The only medium risk articles sold by Carrel-Electrade Ltd are;

Extractor Fans  
Fan Control Switches  
Electric Heaters

SDocs for these items are available from Carrel-Electrade Ltd.

Clause 84 of the regulations states that 'declared high risk articles' may not be sold unless they are approved by the Secretary. Carrel-Electrade Ltd does not sell any high risk articles.

Please note the following;

Under the regulations there is no requirement for a supplier to issue a Supplier Declaration of Conformity unless it is for a declared medium risk article. Articles sold by Carrel-Electrade Ltd that fall into the medium risk category are detailed above.

Carrel-Electrade Ltd does not sell any high risk articles.

This declaration is sufficient evidence of the electrical safety of all other (neither medium nor high risk) articles sold by Carrel-Electrade Ltd i.e. no SDoC is required under the regulations.