



incl. SR250E



Fast and Safe recharging of lead acid batteries (sealed or flooded)

♦ 24 Month Warranty

· Auto or manual initiated boost charge

- Designed to industrial standards
- Automatic temperature compensation
- Short circuit and reverse polarity protection
- Operating state and fault indication
- Fully programmable microprocessor control
- Can safely be left permanently connected to battery, will maintain 'float' charge
- Optional relay alarm outputs (SR250E)
- ISO9001 Design management system
- Fully designed and manufactured in NZ

The **SR** *SmartCharger* is designed to recharge your battery in the shortest practicable time with programmable parameters to suit your specific application.

ELECTRICAL		FEATURES			
Input • standard • option	180-264 or 88-132V, 45-65Hz (internal link select) 88-135VDC (specify at time of order if DC input required, suffix <b>-H</b> )	Switch/ LED Indication & functions	<b>BOOST:</b> Red (Push button to boost) <b>FLOAT:</b> Green (Push button to 'force' float) <b>STANDBY:</b> Red (Push button to turn output off/on)		
Input protection	Internal fuse		Refer to instruction manual for full list of LED operation codes		
Output protection	Automatic shutdown if battery leads reversed	Factory programmable parameters	- Start up in boost or float mode (Boost) - Current terminated boost (Yes)		
Current limit	Constant current limit on overload & short circuit	(default settings shown in brackets)	<ul> <li>Current initiated boost (Yes)</li> <li>Start boost on mains return (Yes)</li> <li>Pre-boost state timer 1-255 minutes (1)</li> </ul>		
Isolation	1KV DC input - output / earth	Please note that some	<ul> <li>Max boost charge time 1-255 minutes (1)</li> <li>Pre-float state timer 1-255 minutes (1)</li> <li>Resume prior state upon mains return timer 1-255 minutes (10)</li> </ul>		
Efficiency	<u>≥</u> 85%	parameters are interde- pendent of each other.			
Inrush current	Soft start		<ul> <li>Resume on boost charge upon mains return 0-255 hours (24)</li> </ul>		
Output power	250W		- Pre-forced float timer 1-255 minutes (1)		
Output voltages	12, 24, 30, 36, 48V (nominal)		8.5minutes(5 minutes)		
Voltage adj. range	Approx 95 - 105% of V nominal				
Tomp componention	Output valtage compensated at $4m$ / / °C /	PHYSICAL			
remp. compensation	cell	AC Input connector	IEC320 socket (AC power cord supplied)		
Line regulation	<0.2% over input range	DC Connections	M6 brass stud or plug-in socket with screw terminals		
Load regulation	<0.4% open circuit to 100% load	Enclosure	Zinc plated steel base/ powder coated lid		
Noise	<0.3%	Temperature sensor	1 7m lead with adhesive pad		
OVP	Over-voltage protection on output at ~ 130% of nominal output voltage	Weight	1.7Kg		
Thermal protection	Yes, self resetting				
		ENVIRONMENTAL			
		Operating temperature	0 - 50 °C ambient at full load De-rate linearly >50° C to no load @ 70° C		
STANDARDS		Storage temperature	-10 to 85 °C ambient		
EMI	to CISPR 22 / EN55022 class A	Humidity	0 - 95% relative humidity non-condensing		
Safety	to IEC950 / EN60950 / AS/NZS3260	Cooling	Natural or fan cooled optional depending on model		

**SPECIFICATIONS** All specifications are typical at nominal input, full load and at 20°C unless otherwise stated.

Due to constant improvements specifications are subject to change without prior notice.

# 250 Watt Three Stage Smartcharger (boost charger)



#### incl. SR250E

STANDARD MODEL TABLE								
MODELS	Float Voltage <sup>*1</sup>	Boost Voltage *1	Output Current (A)	Min - Max Battery (Ah)* <sup>2</sup>				
SR250B12	13.8	14.7	16.7	65 - 200				
SR250B24	27.6	29.4	8.3	30 - 100				
SR250B30	34.5	36.7	6.8	27 - 90				
SR250B36	41.4	44.1	5.6	22 - 70				
SR250B48	55.2	58.8	4.2	15 - 50				

<sup>\*1</sup> May be adjusted to suit battery specifications <sup>\*2</sup>Guidelines only. Please check

manufacturer's recommendations.



## MOUNTING DETAILS / DIMENSIONS



OPTIONS					
Alarm & boost/float indication relays* (Order Code: replace suffix –B with –E)	<ul> <li>Mains fail</li> <li>Batt low (set at 1.83V/cell = 11, 22V, etc)</li> <li>Boost/float</li> </ul>				
Alarm Relay Contacts	C - NO - NC full changeover Rated 1A @ 50V DC or 32VAC				
Adjustable Parameters	All firmware parameters listed under features may be adjusted at time of ordering				
MOUNTING OPTIONS					
Rack mount	2RU x 19" rack - (rear connection) Code: <b>SR-RM2U</b>				
Wall Mount Enclosure	Code: SEC-SR				
	For full information on these options please refer to respective data sheets.				

### WARNING

If the *SmartCharger* is connected to operating equipment during charging:

1. equipment will be subjected to 1.22 times the nominal voltage.

 the standing load must be taken into account for the correct operation of the charger. Please contact our sales office if you have any standing load.

#### MODEL CODING AND SELECTION CHART

<b>SR25</b>	50I	31	2	FS	5					
							Input voltage and front panel standby switch	110V AC + switcl 230V AC + switcl	n = U n = L	110V AC no switch = G 230V AC no switch = blank
				[			Output DC Connector type:	Stud = S	Plug in/	screw terminals = X
						 	Fan cooled:	With fan = F	No fan =	blank
							Temperature Compensation	Yes = T	No = bla	ank
							DC output: Nominal voltage	e 12, 24, 30, 36, 48		
						 	Function	<ul> <li>B = Standard SmartCharger for lead acid batteries</li> <li>E = Standard SmartCharger with alarm relays</li> <li>LI = for Li-ion batteries (see separate data sheet)</li> <li>LI E= for Li-ion batteries with alarm relays (see separate data sheet)</li> </ul>		
				 			- Power	250W		

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