



## PowerSure PSA

## **DESKTOP AND NETWORK PROTECTION**



Hot Swap Batteries



Surge Protection for Data Lines



Line Interactive Design with AVR



USB and Serial Communications Port



Professional Desktop PC's



Professional Workstations



Point-of-Sale Terminals



Small Routers, Bridges, Hubs



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#### DESKTOP AND NETWORK PROTECTION



An Unparalleled Bundle of Features in One Compact Package:

- Hot-Swappable, User Replaceable Batteries
- USB, Serial and Contact Closure Communications
- Four to Six Battery-Backed UPS Outlets
- Two Additional Surge-Only Outlets
- Data-line Surge Protection
- Cold-start on Battery
- Lightning and Surge Protection (TVSS)
- Advanced Early Warning Shutdown
- Minimum Five Minutes of Battery Backup Time
- Configurable Input Voltage Window (220, 230, and 240V)

## Line Interactive UPS that Delivers Cost Effective Power Protection for Electronic Equipment

The Liebert PowerSure PSA is a line interactive UPS with Automatic Voltage Regulation (AVR) that offers full-featured power protection for sensitive electronic equipment. PowerSure PSA offers a unique bundle of features and extraordinary performance.

The Powersure PSA offers USB, serial or contact closure communications in the same compact unit. Designed with simple controls for easy operation, the PowerSure PSA provides over five minutes of back-up time at full load, surge

protection for data and phone lines, and easy to service, hot swappable batteries.

Its Double Boost/Single Buck technology and Wide Voltage Window (155-291V) ensures that the UPS continues to supply clean power to your computer equipment without switching to battery even with very high input voltage fluctuations. This will make the battery life last longer and will protect your investment as well as your data.

# POWERSURE PSA DESKTOP AND NETWORK PROTECTION



## **Applications**

#### **Ideally Suited for:**

- Professional Desktop PC's
- Professional Workstations
- Small Routers, Bridges & Hubs
- Point-of-Sale Terminals
- Other Sensitive Electronics



On 650 and 1000VA the Hot Swap slot is located on the bottom of the unit.

## Plug and Go

PowerSure PSA is designed and packaged for easy set-up and installation. Three status indicators on the front of the UPS signal mains status, overload or overtemperature fault conditions, as well as battery operation and status. The package includes 2 output power cords, a USB cable, a phone-line RJ11 cable, a MultiLink serial communications cable and MultiLink Software CD, and user manual in 5 languages. The PowerSure PSA is certified by Microsoft for use with Windows XP and 2000 systems and by Apple Computer, Inc., for its Macintosh OS X (version 10.2 or later).

#### **Power Communications**

With MultiLink Shutdown Software, you can monitor the status of your UPS and safely shutdown your applications while saving your work. With MultiLink Event Management you can also notify your Network Administrator, via email or SMS that power has failed at your workstation.

With a MultiLink Network Administration License your Network Manager will be able to quickly identify the issue and take action.











**Battery Backed Up** sockets offer surge protection in addition to battery autonomy in case of a power failure. Surge Protected Only sockets offer surge protection for devices that do not need battery back up in case of power failure (InkJet Printers, Scanners, Multimedia Equipment).

#### **Technical Data** [PowerSure PSA]

Model	PSA350MT-230	PSA500MT-230	PSA650MT-230	PSA1000MT-230
Power Rating	1 3A330W11-230	1 3/13001011-230	13/030111-230	1 3A1000W11-230
/A	350	500	650	1000
W	210	300	390	600
Dimensions	210	500	550	300
Jnit (WxDxH mm)	116 x 196 x 222	116 x 196 x 222	116 x 358 x 222	116 x 358 x 222
Shipping (WxDxH mm)	196 x 310 x 293	196 x 310 x 293	242 x 500 x 316	242 x 500 x 316
	190 X 3 IU X 293	190 X 3 IU X 293	242 X DUU X 310	242 X 300 X 310
Veight	7.0	7.4	0.1	12.2
Jnit (kg)	7.0	7.4	9.1	13.2
Shipping (kg)	8.2	8.5	11.2	15.3
nput Parameters				
urge Protection	660]			
Voltage Range w/o Battery Operation	155-291 VAC			
	Dip switch selectable 220-230-240V			
requency Range	46.5-63.5Hz (±0.1)			
Output Parameters				
Output Receptacles	4 IEC-320-C13	(orange)	6 IEC-32	0-C13 (orange)
	Battery Backup	+ Surge Protection	Battery Backu	p + Surge Protection
	2 IEC-320-C13 (black):			olack): Surge Protection
Output Power Cables		2 m detached IEC-320-C14 - W		,
/oltage (Normal Mode)	220-230-240VAC ±10%			
/oltage (Battery Mode)			AC ±8%	
Output Current	1.5A	2.1A	2.8A	4.3A
Vaveform (Battery mode)	1.3/1			4.3/1
	Stepped Sinewave			
requency	50 or 60Hz (auto-sensing)			
Overload warning	>100% (Normal and Battery Mode) >110%			
Overload Shutdown		>11	10%	
attery Parameters				
ype			d, non-spillable, lead acid	
pproved manufacturers			atteries	
Quantity x Voltage x Rating	1 x 12V x 7Ah	1 x 12V x 9Ah	1 x 12V x 9Ah	2 x 12V x 7.5Ah
ransfer time	4-6ms typical			
ackup Time		At 25°C resistive loading with f	ully charged batteries	
ull load (minutes)	8	7	5	5
Half load (minutes)	22	21	15	16
echarge time		6 Hours to 90% capacity, after	full discharge into a resistive lo	
Battery test			14 days	
Deep discharge protection			es	
Black start (w/o mains)			es	
invironmental				
loise		/ A	0dB	
	0°C to +40°C for altitude 0 to 1500 meter above sea level			
Operating temperature	0°C to +40°C for altitude 0 to 1500 meter above sea level			
Communications	USB, Serial RS232, Contact Closure			
JSB Compatibility	Windows 2000, Windows XP, Apple Mac OS			
oftware Compatibility	MultiLink 3.0 supports MS Windows NT/2000/XP/95/98/ME, AIX, Linux, Sun Solaris, HP-UX, Novell Netware			
Package	Multi-language, Multi-page User Manual - MultiLink 3.0 CD or later			
	One (1) DB9 Serial Cable - One (1) USB Cable			
	Two (2) 10A, 2.0 meter output power cord (230V models only) - One (1) RJ11 modem cable			
Varranty		2 Ye	ears	
tandards & Requirements				
afety		EN 50091-1; CE low voltage di	rective; TUV Certificate	
MI / EMC	EN 50091-2, Class B; CE EMC directive			
lectrostatic Discharge	EN61000-4-2, Level 3, Criteria B			
adiation Susceptibility	EN61000-4-3, Level 3, Criteria A			
Conducted Immunity	EN61000-4-6			
lectrical Fast Transient	EN61000-4-0 EN61000-4-0			
	ENG1000-4-4, Level 3, Criteria A  ENG1000-4-5, Level 3, Criteria B			
Surge				
Network Surge	EN60950			
Harmonics	EN61000-3-2			
Flicker Shipping & transportation	EN61000-3-3 ISTA Procedure 1A			
		ISTA Proc	roduro 1A	

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