

Single phase UPS

PULSAR M

2200/3000 VA

Modular on-line
double conversion UPS



Maximum availability

- Configuration. Double conversion on-line UPS with automatic by-pass and power correction factor.
- Continuous power supply. Hot swappable batteries. The HotSwap MBP (Maintenance By-Pass) module allows the UPS to be replaced without interrupting the power supply.
- Redundancy. The ModularEasy kit makes it easy to parallel 2 standard Pulsar M UPSs (N + 1 redundancy).
- Powershare. The Pulsar output sockets are individually controlled to provide load-shedding to maximise the backup time. It also provides remote reboot and sequential start-up as standard.
- Long backup times. 1 to 4 EXB battery units can be added to the Pulsar M. The Pulsar 3000XL has a built-in high speed charger for additional long backup times.

Minimum total cost of ownership

- ModularEasy kit. A simple, low cost solution for upgrading by adding a second standard UPS.

- Easy operation. Multilingual display. Access to a wide range of measurements and set-up menus.
- Remote supervision. A wide range of options using the Solution-Pac supplied: SNMP and HTML, (Network Management Card included with Netpack versions), ModBus/JBus and relay outputs.

Total flexibility Pulsar M has unmatched flexibility

- Format. Pulsar M is available in RT2U convertible rack/tower version (optimised for rack mounting) or RT3U (for tower or shallow rack).
- Connections. With FlexPDU and HotSwap MBP the Pulsar M can be connected by sockets or terminal blocks. They can be installed as required behind, on the side or on top of the unit.
- Compatible with low power factor loads. Pulsar M is rated for 0.9 total power factor (3000VA/2700 W and 2200VA/1980W).
- Interfaces. USB + serial + remote start/stop + slot for optional communications card.

Pulsar MX:
10 minutes backup, tower/rack
mounting (3U), mimic, LCD display.

Adjustable
multilingual display



FlexPDU and Hotswap
MBP can be mounted
in many different positions



PRODUCT FEATURES & BENEFITS

- 1 LCD Multilingual display
 - 6 languages,
 - displays measurements,
 - displays alarms,
 - access to control and set-up menus.
- 2 Panel for replacing batteries without interrupting the output.
- 3 1 USB port + 1 serial port + remote ON/OFF and emergency stop inputs.
- 4 EXB battery unit connector.
- 5 EXB units recognised automatically.
- 6 8 IEC 10A sockets, including 4 Powershare programmable sockets and 1 IEC 16A socket.
- 7 Communications card slot.
- 8 Mountings for HotSwap MBP and FlexPDU.



Specifications

Pulsar M	2200	3000 - 3000 XL
Rating	2200 VA / 1980 W	3000 VA / 2700 W (1)
Format	RT2U (tower / rack 2U) and RT3U (tower / rack 3U)	
Paralleling with Pulsar M ModularEasy kit(2)		
Rating	4000 VA or 2 x 2200 VA redundant	6000 VA or 2 x 3000 VA redundant
Selection of uprating or redundancy	Automatic selection of uprating (2N) or redundancy (N+1)	
Electrical characteristics		
Architecture	On-line double conversion with automatic by-pass and power factor correction	
Input voltage and frequency ranges without using batteries	100/120/160/184 V(3) to 284V - 40 to 70 Hz	
Output voltage and frequency	230V (adjustable to 200/208/220/240 V), 50/60 Hz auto-select or frequency converter mode	
Connections		
Input	1 IEC C20 (16A) or terminal block on HotSwap MBP HW (Hard-Wired)	
Outputs	8 IEC C13 (10A) sockets + 1 IEC C19 (16A) socket on Pulsar M	
Remotely controlled Powershare sockets	2 groups of 2 x IEC C13 (10A) on Pulsar M	
Additional outputs with HotSwap MBP FR/DIN/BS/IEC/HW	4 FR/Schuko sockets or 3 BS sockets or 6 IEC 10A sockets or terminal blocks (HW version)	
Additional outputs with FlexPDU FR/DIN/BS/IEC	8 FR/Schuko sockets or 6 BS sockets or 12 IEC 10A sockets	
Batteries		
Typical backup times for 50 and 70% of the VA rating except for Pulsar M 3000XL(4)		
Pulsar M	17 mn / 12 mn	15 mn / 10 mn
Pulsar M + 1 EXB	85 mn / 60 mn	60 mn / 40 mn
Pulsar M + 4 EXB	285 mn / 200 mn	190 mn / 150 mn
Battery management	Automatic weekly test (period adjustable using LCD display or in software supplied), automatic recognition of external battery units => continuous maximisation of backup time + deep discharge protection	
Interfaces		
Indicators and display	3 LEDs + adjustable multilingual display: display of measurements, access to control and set-up menus	
Communication ports	1 USB port + 1 RS232 serial port(5) + 1 mini terminal block for remote ON/OFF and emergency stop	
Communications card slots	1 slot for NMC Minislot 2006 card (included in Netpack version) or NMC ModBus/Bus or MC Contacts/Serial	
Operating conditions, standards and approvals		
Operating temperature noise level	0°C to 40°C continuous, 45 dBA	
Performance - Safety - EMC	IEC/EN 62 040-3 (VFI-SS-I13), IEC/EN 62 040-1-1, IEC/EN 60 950-1 (RD), IEC/EN 62 040-2 C1 Class	
Approvals	CE, TÜV GS, CB report, cTUV-US	
Dimensions (H x W x D) / Weight		
Pulsar M RT (3U)	131 x 440 x 490 mm (compatible with 600 mm deep rack) / 30 kg	131 x 440 x 490 mm (compatible with 600 mm deep rack) / 30 kg (3000 XL = 18 kg)
Pulsar M RT2U	86 x 440 x 640 mm / 31 kg	86 x 440 x 640 mm / 31 kg
Pulsar M EXB RT3U	131 x 440 x 490 mm (compatible with 600 mm deep rack) / 42 kg	
Pulsar M ModularEasy kit (2U)	86 x 440 x 400 mm / 10 kg	
Part numbers		
	Pulsar M 2200	Pulsar M 3000
Pulsar M RT	68 400	68 402 - M 3000 XL : 68 404
Pulsar M RT2U(6)	68 401	68 403 - /
Pulsar M RT3U HotSwap(7)	FR: 68 406 DIN: 68 407 BS: 68 408 IEC: 68 409 HW: 68 410	FR: 68 412 DIN: 68413 BS: 68 414 IEC: 68 415 HW: 68 416
Pulsar M RT2U Netpack(8)	68 411	68 417
Pulsar M EXB RT3U(6)		68 405
Pulsar M ModularEasy kit(6)(for paralleling 2 Pulsar Ms)		68 418
Pulsar Rack Kit 2U/3U (not supplied with Pulsar M RT)		68 441

1: Maximum rating with EXB battery units =2400 W. 2: Pulsar M ModularEasy kit is a 2U module for paralleling 2 Pulsar M UPSs, available from March 2007 - cannot be used with Pulsar M 3000 XL. 3: Lower limits for <20%, <33%, <66% and >=66% of nominal power. 4: except Pulsar M 3000 XL: UPS with high speed charger; without built-in batteries, for custom configurations: ask us for details. 5: USB and RS232 ports cannot be used simultaneously. 6: Includes rack kit. 7: Pulsar M RT3U HotSwap = Pulsar M RT + rack kit + HotSwap MBP. 8: Pulsar M RT2U Netpack = Pulsar M RT2U