

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 factor correction.
- ▶ Continuous power supply. Hot swappable batteries. The HotSwap MBP (Maintenance By-Pass) module allows the UPS to be replaced without interrupting the power supply.



HotSwap MBP

- ▶ 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

- ▶ 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, (connectUPS included with Netpack versions), ModBus/JBus and relay outputs.



FlexPDU and HotSwap MBP can be mounted in many different positions.



RT2U version.



RT3U version.

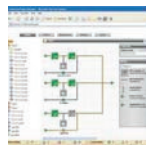
Totally flexibility

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.



Adjustable multilingual display.



ConnectUPS Web/SNMP Card and EPM Software

Ideal protection for:



Servers, data storage and network equipment.



Telephony - VoIP.



Medical equipment - Industrial processes.

M G E

Office Protection Systems

An Eaton Brand



Pulsar M RT3U



Pulsar M RT2U

- 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.

Customer Service & Support

2 year guarantee, including batteries
Standard exchange of product in case of failure, including batteries.

Associated services⁽¹⁾:

Warranty+: 3 year extended guarantee.
Start Up+: on site commissioning.
Warranty+ Silver: Warranty+ and Start Up+.
Warranty+ Gold: Warranty+ Silver and 3 annual service visits.

1: Depending on the country, see www.mgeops.com

Communications software and hardware

Solution-Pac software on CD-ROM with each UPS

For monitoring the server(s) powered by the UPS and for local and remote UPS supervision.

ConnectUPS Web/SNMP Card

For connecting the UPS to an Ethernet 10/100 network, raising SNMP alarms and supervising the UPS using a simple browser interface.

Environmental Monitoring Probe
Monitoring the temperature, humidity and 2 relay contacts via SNMP or HTML.

Enterprise Power Manager
For comprehensive management of a set of UPSs using a Windows PC.

Management-Pac 2 suite
NMS integration kit: HP OpenView, IBM Tivoli Netview, CA Unicenter, etc.

Management Card Contacts/Serial
To provide UPS status outputs via relay contacts, emergency stop and a second serial port.

ModBus/JBus card
For combined SNMP, HTML and ModBus/JBus supervision.

Specifications

Pulsar M	2200	3000
Rating	2200 VA / 1980 W	3000 VA / 2700 W ⁽¹⁾
Format	RT2U (tower / rack 2U) and RT3U (tower / rack 3U)	
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 ⁽²⁾ 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	6 IEC 10A sockets or terminal blocks (HW version)	
Additional outputs with FlexPDU	12 IEC 10A sockets	
Batteries		
Typical backup times for 50 and 70% of the VA rating except for Pulsar M 3000XL ⁽³⁾		
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 ⁽⁴⁾ + 1 mini terminal block for remote ON/OFF and emergency stop	
Communications card slots	1	
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-113), IEC/EN 62 040-1-1, IEC/EN 60 950-1 (RD), IEC/EN 62 040-2 C1 Class	
Approvals	CE - TÜV - CB Report - UL	
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	
Pulsar M EXB RT3U	131 x 440 x 490 mm (compatible with 600 mm deep rack) / 42 kg	

1: Maximum rating with EXB battery units = 2400 W. 2: Lower limits for <20%, <33%, <66% and >=66% of nominal power.

3: Except Pulsar M 3000 XL: UPS with high speed charger, without built-in batteries, for custom configurations: ask us for details.

4: USB and RS232 ports cannot be used simultaneously.

Part numbers

	Pulsar M 2200	Pulsar M 3000
Pulsar M RT	M68 400	M68 404
Pulsar M RT2U ⁽⁵⁾	M68 401	M68 403
Pulsar M RT3U HotSwap ⁽⁶⁾	IEC: M68 409 HW: M68 410	IEC: M68 415 HW: M68 416
Pulsar M EXB RT3U ⁽⁵⁾	M68 405	
Pulsar Rack Kit 2U/3U (not supplied with Pulsar M RT)	M68 441	

5: Includes rack kit and 1 m battery cable. Battery extension cable 1.8 m an option : 68 442. 6: Pulsar M RT3U HotSwap = Pulsar M RT + rack kit + HotSwap MBP. 7: Pulsar M RT2U Netpack = Pulsar M RT2U + NMC 2006 edition.

