

Single phase UPS

PULSAR MX

4/5/8/10/15/20 kVA

High performance UPS
upgradeable from 4 kVA to 20 kVA

Can be used for 20 to 110 servers, ideal for:
■ departmental networks, servers and workstations



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



Pulsar MX has 2 sub-modules (power electronics and battery) which are hot swappable.

Continuous power supply

- Two front access hot-swappable sub-modules (power and battery) for maintenance without load interruption.
- Automatic battery test (test period can be set).
- Internal bypass built-in to supply the load even if the UPS fails.
- Large input voltage and frequency ranges to avoid using the batteries unnecessarily.

Flexible

- Can be used as a free-standing tower unit or 19" rack-mounted: only 3U for Pulsar MX 4000 and 5000, 16U for Pulsar MX Frame
- LCD multilingual display with mimic and LEDs for rapid view of the UPS status, diagnostics and event log
- Outputs: IEC 10A and 16A outlet sockets and hardwired outputs
- Built-in Powershare system for remote reboot of the equipment connected, sequential start-up

or load shedding while operating from battery to maintain the power to critical loads.

- Pulsar MX Frame is compatible with three phase or single phase supplies.
- Backup time: 10 mins up to 2 hours by adding 3U battery extension modules.

Minimum total cost of ownership (TCO)

- More power with an output power factor of 0.9.
- When the power supply needs to be upgraded, the Pulsar MX 4000 and 5000 can be paralleled to provide 8 kVA or 10 kVA using the ModularEasy kit: without extra cost on the initial purchase.
- Pulsar MX Frame is a modular system with 5 kVA sub-modules paralleled to provide up to 20 kVA or 15 kVA with redundancy.



Pulsar MX Frame 15 and 20 kVA tower and rack-mounting (16U), modular system with 5 kVA sub-modules.

Communications

- Solution Pac 2 suite supplied for remote supervision.
- MGE's Enterprise Power Manager for supervision via Ethernet and Teleservice. EPM is compatible with standard network management systems (Tivoli, CA uncenter, HP Openview).
- Compatible with Network Shutdown Module for monitoring a number of UPSs and shutting down the servers on the network.
- MGE PowerServices™
 - 1 year guarantee, including batteries.
- Associated services (I)
 - Extended guarantee.
 - Commissioning.
 - Teleservice (in-band and out-of-band).
 - Personalised maintenance contracts.

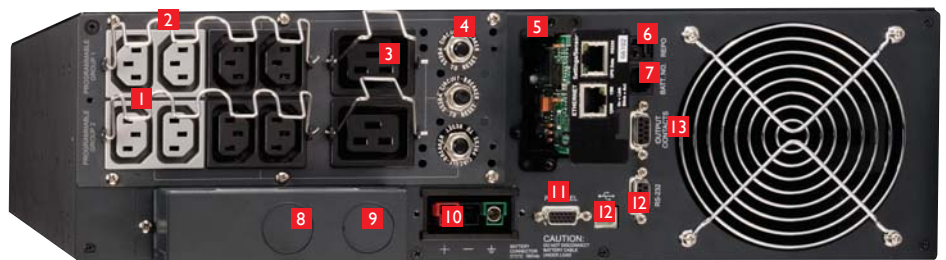
I: Depending on the country, see www.mgeups.com/services

PRODUCT FEATURES & BENEFITS

- 1 8 IEC 10A outlet sockets.
- 2 Retention clips.
- 3 2 IEC 16A outlet sockets.
- 4 Output circuit protection.
- 5 1 minislot for NMC, Modbus/JBus or MC Contacts/Serial card.
- 6 RJ11 remote power off.
- 7 RJ45 EXB battery module detection.
- 8 Output.
- 9 Input.
- 10 EXB battery extension module power connector.
- 11 DB 15 paralleling.
- 12 DB 9 serial and USB ports: Setup and supervision.
- 13 DB9 with 5 output contacts.



Paralleling 2 Pulsar MXs using ModularEasy for 2N or N+1 redundancy.



Specifications

Pulsar MX RT	4 kVA	5 kVA	15 kVA(1)	20 kVA(1)
Rating (kVA) / (kW)	4 kVA / 3.6 kW	5 kVA / 4.5 kW	15 kVA / 13.5 kW	20 kVA / 18 kW
Paralleling				
Maximum rating / redundancy(2)	8 kVA / 4 kVA + 4 kVA redundancy	10 kVA / 5 kVA + 5 kVA redundancy	15 kVA / 10 kVA + 5 kVA redundancy 5 kVA + 2 x 5 kVA redundancy	20 kVA / 15 kVA + 5 kVA redundancy 10 kVA + 2 x 5 kVA redundancy
Inputs				
Technology	VFI-SS-113, on-line double conversion with power factor correction, convection cooled static bypass switch			
Number of phases, input connections	L + N, terminals up to 6 mm2		L + N or 3P + N, terminals up to 35 mm2, separate or common AC normal and AC bypass	
Nominal voltage	200/208/220/230/240/250 V		200/208/220/230/240/250 V (L + N) or 380/400/415 V (3P + N)	
Voltage range without using battery(3)	120 - 280 V		120 - 280 V (L + N), 250 - 465 V (3P + N)	
Input frequency range, THDI	40-70 Hz, < 7%			
Outputs				
Output connections(4)	terminals + 8 IEC C13 (10A) + 2 IEC C19 (16A)		terminals + 16 IEC C13 (10A) + 4 IEC C19 (16A)	
Remotely controlled Powershare sockets	2 groups (2 IEC C13 10A per group)		2 groups (4 IEC C13 10A per group)	
Output voltage and frequency(5), THDU, efficiency(6)	200/208/230/240 /250 V, 50 / 60 Hz autoselect, frequency converter as standard, <2%, 97%			
Backup time(7)				
Pulsar MX standard backup time	10 minutes	8 minutes	8 minutes	
Pulsar MX + EXB / MX + 2 EXB / MX + 3 EXB	45 / 80 / 120 minutes	35 / 60 / 95 minutes	20 minutes(8) / 35 minutes(9)	
Communications				
Slots	1 minislot or 2 minislots (Frame) compatible with Minislot NMC, NMC ModBus/JBus, MC Contacts/Serial			
Ports	Remote Power off (RJ11), 5 output contacts (DB9), setup using Solution-Pac(10) (USB and DB9-serial ports), EXB module detection (RJ45), paralleling (DB 15)			
Operating conditions, standards and approvals				
Performance, safety, EMC, surge protection	IEC/EN 62 040-3, IEC/EN 62 040-1-1, IEC/EN 62 040-2 class A (class B as option), 4 kV IEC 61 643, UL 1778 and CSA 22.2(11)			
Operating temperature, noise, approvals, guarantee	0°C to 40°C continuous, 45 dbA(12), UL, TÜV, GS mark, CB, C-Tick, CE, IEC 61 931, one year(13)			
Dimensions / weight				
Pulsar MX RT standard backup tower	444.5 mm high x 130.6 mm wide x 735 mm deep / 57 kg		Tower 690 mm high (795 mm casters) x 444.5 mm wide x 735 mm deep / 250 kg Rack 16U x 444.5 mm wide, compatible with 800-1000 mm deep rack	
Pulsar MX RT standard backup rack	3U x 444.5 mm wide compatible with 800-1000 mm deep rack		250 kg Rack 16U x 444.5 mm wide, compatible with 800-1000 mm deep rack	
MX EXB battery unit tower / rack	444.5 mm high x 130.6 mm wide x 650 mm deep / 3U x 444.5 mm wide / 70 kg		dimensions same as MX Frame / 230 kg for 15 kVA, 290 kg for 20 kVA	
Pulsar MX ModularEasy, paralleling kit	dimensions same as EXB battery unit / 10 kg			

1: Available from November 2006. 2: 2 Pulsar MXs can be paralleled using ModularEasy. 3: At 70% load. 4: 4 IEC C13 (10A) 2 m long cables for use with retention clips (8 cables for use with Pulsar MX Frame). 5: Frequency conversion for non-paralleled units only. 6: Economy mode, 91% in normal mode. 7: At 70% nominal rating with power factor 0.7 typical values after 3 charge/discharge cycles, with 3-5 year old batteries. Weekly battery test without interrupting the load (daily or monthly if required). EXB compatible with 0.8 power factor loads. 8: With Pulsar MX Frame EXB (4 battery units). 9: With Pulsar MX Frame EXB (8 battery units). 10: Solution-Pac CD-ROM supplied as standard. 11: Applicable to US models. 12: 50 dbA above 5 kVA. 13: Depending on the country, see www.mgeups.com/service. 14: 68 513 = 68 526 (empty Pulsar MX Frame) + 3 x 68 524 + 3 x 68 523. 15: 68 514 = 68 526 (empty Pulsar MX Frame) + 4 x 68 524 + 4 x 68 523.

Part numbers

	Pulsar MX 4000 RT	Pulsar MX 5000 RT	Pulsar MX 15000 Frame 16U	Pulsar MX 20000 Frame 16U
Pulsar MX RT Tower or rack-mounting: standard backup time	68 501	68 504	68 513(14)	68 514(15)
Pulsar MX RT Netpack: standard backup time + NMC + rack kit	68 502	68 505	(with rack kit, casters, NMC card)	(with rack kit, casters, NMC card)
Pulsar MX EXB RT : battery extension module		68 515	68 527 (Pulsar MX Frame EXB empty to be fitted with 4 or 8 Battery sub-modules)	
Pulsar MX ModularEasy, paralleling kit (2 Pulsar MX)		68 520	-	
MX / EXB RT Rack Kit: rail kit for 19" rack mounting		68 002	-	
IEC 32 A kit , 2 X 2 m long cables: male to hardwired and female to hardwired		68 525	-	
Pulsar MX Battery / Power electronics sub-module	68 524 / 68 522	68 524 / 68 523	68 524 / 68 523	

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