

Eaton BladeUPS

12 – 60 kW



Advanced power protection for:

- Small, medium and large data centres
- Blade servers
- Network environment
- PBX and VoIP equipment
- Networking applications: IPTV, security
- Storage devices: RAID, SAN



High Efficiency UPS for Data Centres

Premium power performance

- BladeUPS provides scalable, flexible backup power optimized for high-density blade servers and IT equipment.
- A single module of BladeUPS provides 12 kW of power in only 6U of standard rack space, including batteries
- A scalable solution that delivers up to 60 kW of redundant power in a single rack enclosure.
- BladeUPS delivers an industry-leading 97% efficiency, resulting in cooler operating conditions and less heat dissipation.

True reliability

- Patented Powerware Hot Sync® technology makes possible to parallel six UPS modules for extra capacity or redundancy.
- ABM® technology charges batteries only with necessary, preventing battery corrosion and prolonging battery service life by up to 50%.
- Replacing hot-swappable batteries and electronic modules can be done without interrupting the power, which dramatically improves the availability of the protected IT equipment.

Extensive configurability

- BladeUPS is extremely flexible and supports a variety of system architectures to fit to your specific requirements and desired levels of redundancy. BladeUPS also accommodates growth through its saleable building-block architecture.
- Due to the low heat dissipation, air conditioning requirement reduce by up to a third and BladeUPS can be located close to IT equipment.
- BladeUPS automatically detects parallel modules and self-configures for parallel operation.
- A module working in a parallel configuration can be separated and easily re-deployed as a stand-alone module.
- Each BladeUPS can be configured with its own external battery backup.
- BladeUPS is a scalable UPS with its own power distribution, courtesy of the Rack Power Module. The 3U RPM delivers single-phase power and can be deployed in the same rack as the UPS and IT equipment.
- The BladeUPS can be monitored over LAN or the Internet.

Cost savings and sustainability

- A high level of efficiency leads to utility cost saving, with a 60 kW N+1 solution paying for itself over a 5 year period through energy and cooling savings alone.
- The small footprint of BladeUPS allows extra space for IT equipment in the rack and data centre.
- Eaton uses sustainable materials and highly efficient manufacturing technology to dramatically reduce the carbon footprint when compared to UPS systems on the market.

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Powering Business Worldwide

TECHNICAL SPECIFICATIONS

General	
Power Rating	12 kW per UPS module
Efficiency	Up to 97 per cent
Heat Dissipation	371W/1266 BTU/hr at 100% rated load
Cooling	Fan cooled, temperature microprocessor monitored; front air entry, rear exhaust
Audible Noise, Normal Operation	<60 dBA at 1 meter
Altitude Before Derating	1000 meters (3300 ft ASL)
Input	
Input Voltage	400 Vac
Voltage Range	400V: 311 to 519 Vac, phase to phase
Frequency Range	50 or 60 Hz, ± 5 Hz
Input Current Distortion	<5% with IT loads (PFC power supplies)
Input Power Factor	>0.99 with IT loads (PFC power supplies)
Inrush Current	Load dependent
Input Requirements	Three-phase, four-wire + ground
Bypass Source	Same as input (single feed)
Generator Compatibility	Fast sync slew rate for generator synchronisation
Output	
Rated Output Voltage	400V: 180 to 240 Vac, Ph to N
Output Configuration	Three-phase, four-wire + ground
Output Frequency (nominal)	50 or 60 Hz auto-detection on startup
Frequency Regulation	0.1 Hz free running
Load Power Factor Range	Lagging: 0.7 Leading: 0.9
Total Output Voltage Distortion	<3% with IT loads (PFC power supplies) <5% non-linear or non-PFC power supplies
Battery	
Battery Type	VRLA - AGM
Battery Runtime (Internal)	13 minutes at 50 per cent load 4.7 minutes at 100 per cent load
Battery String Voltage	240 Vdc
Battery Test	Automatic battery test standard (remote scheduling capable) Manual battery test from front display
Battery Recharge Profile	ABM three-stage charging technology
Battery Cut-off Voltage	Variable from 1.67 VPC at <5 min. runtime
Battery Low Condition	Announced with alarm
Extended Battery Capability	Yes, add up to four additional 3U battery enclosures (~34 min at 100 per cent load, >1 hour at 50 per cent load)
Physical	
Dimensions (HxWxD) UPS	261 (6U) x 442 x 660 mm 132 (3U) x 437 x 660 mm
Note: Total Chassis Weight without batteries or electronics	46 kg
Total Chassis Weight with batteries or electronics	140 kg
Total UPS Weight without Batteries	61 kg
Total UPS Weight with Batteries	140 kg
EBM Weight	77 kg

Communications and User Interface	
Software Compatibility	UPS ships with Software Suite CD containing LanSafe power management software and a trial version of PowerVision
X-Slot Bays	Two available for the cards listed below
Control Panel LCD	Two lines by 20 characters Four menu-driven interface buttons Four status at a glance LEDs
Multi-language	English standard; 20 languages available
Configuration Changes	User capable, firmware auto configures
Dry Contact Inputs	Two, user-configurable
Dry Contact Outputs	One, user-configurable
Service	
Installation	User capable, located in the IT racks
Preventative Maintenance	User capable, optional factory service available
Corrective Maintenance	User capable, optional factory service available
Serviceability Features	Hot-swappable batteries Hot-swappable electronics module Automated internal maintenance bypass Auto-configure firmware Flash firmware upgradeable
Certifications	
EMI	IEC 62040
Surge Protection	ANSI C62.41, Cat B-3
Hazardous Materials (RoHS)	EU Directive 2002/95/EC Category 3 (4 of 5)
Warranty	
Standard	12 months
Warranty Repair	Factory depot repair or replace
Options and Accessories	
Detachable input cord	
Detachable input/output cord assembly	
Detachable paralleling cord assembly	
Extended Battery Modules (EBMs)	
3U output sub-distribution module	
0U to 3U rack power strips	
60 kW Powerware BladeUPS Parallel Bar	
Four-post rail kit	
Optional X-Slot Communication Cards	
Application	Card
Web SNMP	ConnectUPS-X Web/SNMP Card
Environment Monitoring	EMP Environmental Monitoring Probe (requires Web/SNMP card)
Modbus® RTU	Modbus Card
IBM eServer™ (i5™, iSeries™, or AS/400), industrial	Relay Interface Card
Parallel	Powerware Hot Sync Card
Remote Monitoring	Modem Card
Remote LCD Display	ViewUPS-X
Recommended ePDU:	
Y032440CD100000	RPM - Rack Power Module (BladeUPS in, 12xC13 + 6xC19 out) 20 ft lead
PW107BA0UC08	ePDU - Basic (0U, Dual 16A C20 in, 24xC13+ 8xC19 out) use in addition to RPM
PW107MI0UC08	ePDU - IP Monitored (0U, Dual 16A C20 in, 24xC13+ 8xC19 out) use in addition to RPM