

## BLADEUPS POWER SYSTEM TECHNICAL SPECS

General Characteristics	
Power Rating	12 kW per UPS Module
Efficiency	Up to 97%
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	58 dBA at 1 meter
Altitude	1000 meters (3300 ft. ASL)
Input Characteristics	
Input Voltage	400 Vac
Voltage Range	400V model: 311 to 519 Vac
Frequency Range	50 or 60 Hz, $\pm 5$ Hz, auto detecting
Input Current Distortion	<5% with IT loads (PFC power supplies)
Input Power Factor	>.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 optimum generator operation
Output Characteristics	
Rated Output Voltage	400V model: 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: 0.85
Total Output Voltage Distortion	<3% with IT loads (PFC power supplies) <5% non-linear or non-PFC power supplies
Battery Characteristics	
Battery Type	VRLA - AGM
Battery Runtime (Internal)	13.6 minutes at 50% load 4.7 minutes at 100% load
Battery String Voltage	240 Vdc (Internal redundant strings in each module)
Battery Test	Automatic battery test standard (remote scheduling capable). Manual battery test from front display
Battery Recharge Profile	ABM Technology. Advanced three-stage charging technique
Battery Cut-off Voltage	Variable from 1.67 VPC at <5 min. runtime to 1.75 VPC at >90 min. runtime
Battery Low Condition	Announced with alarm
Battery Load Share	Yes: based on battery voltage during discharge. Load shifted to systems with strongest batteries to give longest runtime for battery condition
Extended Battery Capability	Yes, add up to four additional 3U battery enclosures >34 min at 100% load, >1 hour at 50% load)
Physical Characteristics	
Dimensions (HxWxD) Installed	266 x 438 x 660mm
Shipped	686 x 991 x 1168 mm
EBM	132 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 trial version of PowerVision

X-Slot® Bays Two available for the cards listed below

Optional X-Slot Communication Cards	Application	Powerware Card
	WEB - TCP/IP	ConnectUPS-X Web/SNMP Card
	Modbus RTU	Modbus Card
	IBM eServer (i5, iSeries, or AS/400)	Relay Interface Card
	Parallel	Powerware Hot Sync CAN Bridge Card
	Remote Monitoring	Modem card

Control panel LCD Two lines by 20 characters  
Four menu-driven interface buttons  
Four status at a glance LEDs

Multi Language Standard: English, Spanish, French, German, and Portuguese  
Available: Finnish, Norwegian, Swedish, Russian, Hungarian, Polish, Romanian, Czech, Danish, Greek, Turkish, Bulgarian, Korean, and Chinese

Configuration Changes User capable, firmware auto configures.  
Online firmware updates available for operational changes

Dry Contact Inputs Two, user configurable

Dry Contact Outputs One, user configurable

## Service

Installation User capable, located in the IT racks, operational factory service available

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

Safety 400V model: CE

EMI 400V model: EN62040-2 Class A

Surge Protection ANSI C62.41, Cat B-3

Hazardous materials (RoHS) Complies per EU Directive 2002/95/EC Category 3 (4 of 5)

## Warranty

Standard 12 months from install / 18 months from shipment

Warranty Repair Factory depot repair or replace

## Service Support Agreements<sup>2</sup>

Depot PowerTrust Express

On-site 5x8 PowerTrust Value

On-site 7x24 PowerTrust eight-, six- or two-hour response

## Options and Accessories

Detachable input cord

Detachable input/output cord assembly

Detachable paralleling cord assembly

Extended Battery Modules (EBM)

3U output sub-distribution modules (RPM)

0U to 3U rack power strips

60 kW Powerware BladeUPS Parallel bar

X-Slot Communication Cards (see [Communications and User Interface](#) above)

Remote monitoring service by Eaton: eNotify; requires purchase of Web Card and Environmental Monitoring Probe