

Eaton 9135 UPS



Product snapshot

Power rating: 5 kVA/3.5 kW; 6 kVA/4.2 kW

Voltage: 230V nominal,
200–250 Vac range

Frequency: 50/60 Hz (auto-sensing)

Configuration: Rackmount (3U) or tower

Advanced power protection for:

- Medium-density data centers
- Banking and security systems
- Manufacturing process control
- Retail point-of-sale systems
- Telecommunications/VoIP equipment.

Features

- Provides clean, continuous power to protect critical equipment and applications from power-related downtime, data loss and corruption, and process interruption
- Saves valuable rack space by delivering 5000 - 6000 VA/4200W in only 3U
- Offers deployment versatility through rack and tower installation options with rail kits and pedestals provided
- Increases availability with hot-swappable batteries and power module
- Offers extended battery runtime options to power essential systems for more than an hour during an outage
- Simplifies UPS monitoring and management with a bright LCD user interface, intuitive LanSafe® & NetWatch software
- Provides two-year limited warranty

The Eaton® 9135 UPS, Powerware® series, resolves utility power problems and supplies continuous, conditioned power. You get clean power for valuable IT and networking equipment, battery backup to gracefully handle utility outages, and on-demand visibility into UPS status from anywhere.

Get more usable power for less cost

The 9135 provides exactly the level of power protection needed under the conditions of the moment—optimizing for both efficiency and performance. The more efficient the UPS, the lower your utility and cooling bills.

Under normal power conditions, the UPS can operate in high-efficiency mode at up to 97 percent efficiency. In double conversion mode, the UPS operates at up to 91 percent efficiency.

Double-conversion design for superior reliability and protection

In double conversion mode, the 9135 is constantly monitoring power conditions—regulating both voltage and frequency. Even when presented with the most severe power problems, this UPS's output remains within two percent of nominal voltage.



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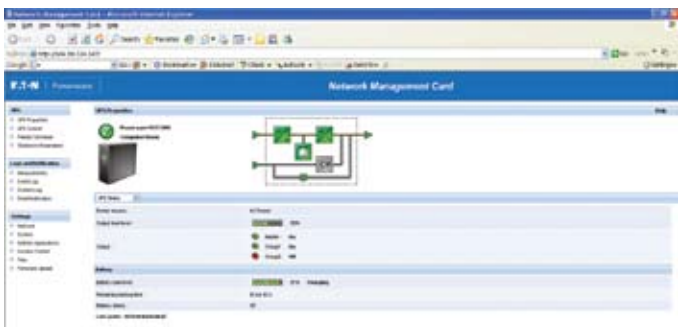
Rack model and EBM installation



Hot swappable batteries



Load segments



ConnectUPS-MS Network Management Card web interface

With a wide range of acceptable input voltages, this UPS does not depend on batteries to smooth out power fluctuations. Batteries are conserved for those times when utility power is highly unstable or completely out. If an outage occurs, the 9135 transfers to battery with no break in power, making this an ideal UPS for equipment sensitive to voltage fluctuations.

More power in less space

High power density. The 9135 increases power density, delivering 5000 - 6000 VA/4200W in only 3U of rack space, freeing more rack space for IT and telecom equipments. Rail kits and tower pedestals are included with every 9135 for flexible installation.

This UPS is even more user-friendly than its predecessors offering greater distribution capabilities, with eight IEC 10A & two IEC 16A outlets to power multiple pieces of equipment without a PDU.

You can combine the 9135 with an Eaton enclosure PDU (ePDU™) to power an entire rack of equipment from a single power cord input. ePDU outlets can be monitored, switched, sequenced and managed individually, providing maximum flexibility in distributing power from the 9135.

Maximum availability for critical systems

Battery runtime for minutes or hours. During a power outage, internal batteries in the 9135 keep loads running long enough to gracefully shut down systems. Add up to four external battery modules (EBMs) to deliver more than an hour of extended runtime at full load—or hours under lighter loads. Each EBM occupies only 3U of rack space. These battery modules are hot-swappable and can be replaced at any time without interrupting UPS operation and load protection.

Maximum battery runtime for critical equipments. LanSafe power management software enables independent control of load segments. With this feature, you can manage scheduled shutdowns and sequential startups of protected loads. During a power outage, you could shut down power to less essential loads to extend battery backup time for more critical devices.

When the load segments feature is used with optional ConnectUPS-MS connectivity cards, users can remotely re-boot locked-up network equipment. Simply access the ConnectUPS-MS card over the network, and toggle the password-protected load segment controller to get your network back online.

Service without downtime. The 9135 features hot-swappable components and an automatic internal bypass. The UPS automatically switches to an alternate power path within the unit if it senses a trouble condition with an internal component. Users can even remove and replace the battery and power modules without powering down the UPS or interrupting power to loads.

Visibility, control and management from anywhere

Local UPS status at a glance. An intuitive LCD interface provides detailed information and menu-driven functions for UPS management. The entire display rotates for the best orientation, whether the UPS is used vertically as a tower unit or horizontally in a rack. The blue, backlit LCD screen displays four lines of alphanumeric information. LEDs clearly display UPS status:

- Load Protected
- Downgraded Operation
- Load Not Protected
- UPS ON/OFF button

Choice of connectivity options. Connectivity options are available for almost any networking environment. The standard unit comes with USB and RS-232 serial communication ports and a DB-9 dry contact port. You can customize your UPS by adding MS-slot interface options for other types of communications, such as:

- A direct connection to the Ethernet network and the Internet, with the ability to monitor and manage the UPS from a standard Web browser
- Serial connection for monitoring and graceful shutdown of up to five servers running various operations systems
- Serial connection for simple alarm notification via isolated contacts to signal a change of state in UPS operation (typical in IBM® eServer® iSeries applications)

Unified management for power protection. The 9135 comes complete with the Eaton Software Suite CD, including SNMP-compatible LanSafe power management software. LanSafe provides control and visibility over multiple UPSs, using an intuitive, graphical interface. From a central vantage point anywhere within the reach of a network connection, you can:

- Establish prioritized shutdown of network devices and client/server applications
- Test all network-connected UPSs from one node
- Stay informed of power problems via email broadcasts



LCD rotatable display



Web/SNMP card with ModBus



Web/SNMP card



Relay/serial interface card

MODELS

Catalog number	Style number	Rating (VA/Watts)	Input plug	Output receptacles	Dimensions H x W x D, mm	Weight, kg
Rack Tower Models						
PW9135G5000-XL3UEU	103006721-6591	5000/3500	Hardwired	Hardwired + (2) C19, (8) C13	130 x 444 x 741	57
PW9135G6000-XL3UEU	103006722-6591	6000/4200	Hardwired	Hardwired + (2) C19, (8) C13	130 x 444 x 741	57
Extended Battery Modules						
PW9135N6000-EBM3U	103006723-6591	NA	NA	NA	130 x 444 x 650	77.5

BATTERY BACKUP TIMES (IN MINUTES)

Loads (VA/Watts)	Standards Internal Batteries	+1 EBM	2 EBMs	+3 EBMs	+4 EBMs
1000/700	36	132	232	332	433
2000/1400	13	52	95	140	184
3000/2100	10	40	74	110	146
4000/2800	7	29	53	80	107
5000/3500	5	22	41	62	83
6000/4200*	4	18	33	50	68

* Runtimes available for the 6 kVA model only.

Technical specifications

General

User interface	Graphical LCD with blue backlight and text in English, French, German, Portuguese, Italian and Spanish
LEDs	Four status-indicating LEDs
Topology	Double-conversion
Diagnostics	Full system self-test
UPS bypass	Automatic bypass
Dimensions	See models selection guide
Rail kit	Included with all units

Electrical Input

Nominal voltage	230V 220V-240V user selectable
Voltage range	156–280 Vac (output PF 0.7)
Power draw of UPS (full load)	5000VA: 21.7A @230V 6000VA: 26A @230V
Recommended input-breaker rating	35A
Frequency	50/60 Hz autoselect
Frequency range	40–70 Hz

Electrical Output

Power factor	0.7
On utility voltage	±2% of nominal regulation
On battery voltage	±2% of nominal regulation
Efficiency	>97% in high-efficiency mode; 91% in normal mode
Frequency regulation	±3% Hz online
Load crest factor	3 to 1

Battery

Internal battery type	5.5Ah, sealed, lead-acid; maintenance free
External battery modules	Up to four per 9135, rail kits included for rack mounting
EBM battery type	5.5 Ah, sealed, lead-acid; maintenance free
Battery runtime	Four (4) minutes with internal batteries @100% load (0.7 PF) For additional details, see battery runtime chart
Battery recharge time	Six (6) hours to recover 90 percent of nominal backup time after 100 percent RCD load discharge
Battery replacement	Hot-swappable internal and external batteries
Start-on-battery	Allows start of UPS without utility input

In the interests of continual product improvement all specifications are subject to change without notice.

Communications

Serial port	RS-232 standard, RS-232 cable provided
USB port	HID standard, for communicating with Windows XP/Vista
Relay output	DB-9 Dry Contact-common alarm standard
Software	LanSafe & NetWatch monitoring and management software
Optional communication cards	ConnectUPS-MS Network Management Card for direct control and monitoring in SNMP-based networks ConnectUPS-MS Card with ModBus RTU interface Serial Management Card-MS for integration to industrial environment and building management systems, remote shutdown for IBM AS/400 systems

Environmental

Safety markings	CE, GS
EMC	IEC/EN 62 040-2 class A
Audible noise	Max 46 dB
Ambient operating	0°C to +40°C
Storage temperature	-20°C to +40°C with batteries and -25°C to +55°C without batteries
Relative humidity	5–90% non-condensing

Heat dissipation (BTUs/hr)

Operating mode	Efficiency	5 kVA	6 kVA
Normal	91%	1150	1350
Battery	86%	1650	1960
High efficiency	97%	370	450



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