



Highlights

- Provides up to 6000 VA/5600 W in only 4U of rack space
 - A 95 percent or greater efficiency rating helps reduce energy usage and costs
 - Intuitive, customizable LCD display in nine languages and bundled intelligent IBM UPS Manager software enhance control and manageability
 - IPv6 compliance for future proofing and real-time clock for error logging
 - Integrates with IBM Systems Director Active Energy Manager™
-

IBM 6000 VA LCD 4U Rack UPS

Space-saving, high-density power protection

In today's high-availability server environments, unplanned power outages or line quality irregularities can have a considerable financial impact on small, medium and large enterprises alike. Selecting the right Uninterruptible Power Supply (UPS) can efficiently, reliably and affordably help protect against these costly incidents.

The IBM 6000 VA LCD 4U Rack UPS provides smart energy management and the high-level power protection that today's IT infrastructures require.

Delivering up to 5600 watts of power in 4U of rack space, this 6000 VA Rack UPS optimizes power protection and is designed for high-efficiency operation. This can help reduce energy usage and cooling costs, improve energy management and optimize workload performance and availability for IBM System x® and BladeCenter® server environments.

Achieve fast ROI with high-density and energy-efficient design

This UPS packs more real power (watts) into its space-saving 4U design. The compact unit preserves valuable rack space to protect more equipment and leave room for expanding IT systems.

Designed to operate at a 95 percent or greater efficiency rating, the IBM 6000 UPS lowers power consumption, produces less heat dissipation and decreases cooling costs. That means that even an organization with only a modest number of servers can significantly reduce energy bills without compromising performance or reliability.



Superior performance and high availability

An inherent aspect of this UPS is ABM technology, which incorporates sophisticated sensing circuitry and an innovative three-stage charging technique to significantly extend battery service life and optimize recharge time. ABM also provides up to 60-days notification when the battery is approaching the end of its useful life, providing you more than sufficient time to hot swap the batteries without powering down the UPS or protected loads.

For applications requiring extended backup times, an external battery module can be added to the IBM 6000 UPS, delivering hours of backup time to critical systems during a prolonged power outage.



The IBM 6000 UPS delivers up to 6000 VA/5600 W of advanced power protection in a space-saving 4U rack design.

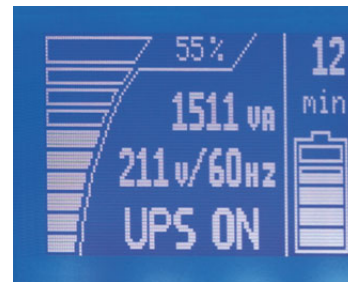
The UPS is also equipped with load segments, which allows for individual control of receptacle groups that can be programmed to preserve battery run time for more critical devices. For increased accuracy, the IBM 6000 UPS features a

real-time clock, which enables precise shutdown and power-up of systems in preferred sequence and real-time stamping on event logs to track and record specific power-related occurrences over time.

The IBM 6000 UPS is equipped with a REPO port enabling the UPS to be remotely switched off in the event of an emergency.

Intuitive UPS management

The intelligent display of the IBM 6000 UPS offers a bright, easy-to-navigate panel that provides configurability and displays important status information in nine languages—English, French, German, Spanish, Russian, Korean, Japanese, Simplified Chinese and Traditional Chinese. The IBM 6000 UPS is exceptionally easy to manage and an ideal enterprise solution for standardization across the global enterprise. Run time, load and other vital information and troubleshooting are displayed.



Bright graphical LCD user interface simplifies UPS monitoring and management

The IBM 6000 UPS includes, free-of-charge, intelligent IBM UPS Manager software to monitor, manage and gracefully shut down connected load in the event of an extended power interruption. The UPS allows for dual communication through the USB port and optional Network Management Card (46M4110) at the same time, an effective redundancy feature to maximize communications flexibility. The NMC supports IPv6 IP addressing and security and provides convenient, over-the-network UPS remote monitoring and management through a standard web browser. An optional Environmental Monitoring Probe (46M4113) is also available for thermal (temperature and humidity) management requirements.

Improved energy management

IBM Systems Director Active Energy Manager (AEM) provides an array of new features that allow power and thermal trending analysis for improved power management. By plugging systems into an IBM UPS, AEM is able to collect power information for each device, presenting a more complete view



of energy usage within the data center. With access to accurate, detailed information on power usage right at their fingertips, IT and facility managers are now able to manage their data centers for optimal energy-efficiency, migrating workloads to eliminate hot spots or transfer work from underutilized systems to conserve energy.

Simplified deployment

The IBM 6000 is a rack-ready UPS product that supports preconfigured shipment in an IBM rack. The modular design of the UPS and EBM allows for scalability and versatility.

IBM UPS solutions are designed by IBM and manufactured to IBM's demanding specifications by Eaton Corporation, a recognized global leader in power management. This longtime partnership enables you to receive IBM's renowned service, support and warranty protection worldwide, coupled with Eaton's expertise in UPS and power management software solutions. IBM power protection solutions integrate into both IBM Systems Director and Tivoli® products.

IBM 6000 VA LCD 4U Rack UPS technical specifications

		
IBM model number	LCD 4U Rack UPS (200/208 V)	LCD 4U Rack UPS (230 V)
IBM part number	53956AX	53956KX
VA/Watts rating	6000 VA/5600 W	6000 VA/5600 W
Nominal output voltage (Vac)	208 V	230 V
Waveform type	Sine wave	
Output connections (All output receptacles are controllable via Two Load Groups (segments))	(2) NEMA L6-30R (4) IEC 320 C19	(4) IEC 320 C19 (6) IEC 320 C13
Nominal output voltage (Vac)	184 - 228 V (208 V)	208 - 253 V (230 V)

IBM Systems and Technology
Data Sheet

IBM 6000 VA LCD 4U Rack UPS technical specifications

Input		
Nominal input voltage	208 V	230 V
Input frequency (auto sensing)	50/60 Hz +/- 3 Hz	
Input connection type	N/A	N/A
Input cords	Hardwire	Hardwire
Input voltage range, mains operations	155 - 255 V for 208 V	160V - 286 V for 230 V

Batteries	
Typical backup times	14.0 minutes (@ 50% load) 5.0 minutes (@ full load)
Battery type	Valve Regulated Lead Acid (VRLA)—Maintenance-free, sealed, leak-proof
Optional external battery pack	Yes, part number 69Y1984
Typical recharge time	4 hours to 90% charge from a UPS/battery discharge of 50% rated load

Communications and Management	
Interface port	USB HID Port/Serial/Optional LAN Card
Management software included	IBM UPS Manager software
Control panel	Intelligent three-button, dual-color, backlit graphical LCD displays vital UPS status in nine languages
Audible alarm	Alarm when on battery: distinctive low battery alarm
Remote Power Off (REPO)	REPO port

Surge Protection and Filtering	
Surge energy rating	1300 joules
Filtering	ANSI/IEEE C62.41; 1991 CATEGORYB3 (SURGE)

Physical	
Rack height	4U
Maximum height dimensions	178.5 mm/7 in
Maximum width dimensions	438 mm/17.25 in
Maximum depth dimensions	790 mm/31 in
Packaging size (WxHxD)	985 x 600 x 365 mm/39 x 24 x 14.4 in
Product weight	72 kg/159 lb
Packaging weight	83 kg/183 lb
Color	IBM Black Bezel

IBM Systems and Technology
Data Sheet

IBM 6000 VA LCD 4U Rack UPS technical specifications

Environmental and Safety

Audible noise, 1 meter from unit surface	Normal operation at rated load and Battery Discharge Mode <50 dbA For Load <70% <50 dbA
Efficiency	95% minimum at full rated load—normal operation, not during battery recharge
Operating temperature	0°C (32°F) to +40°C (104°F)
Relative humidity	0-90% non-condensing
Safety markings	UL, cUL; IEC/EN 62040-1-1, IEC/EN 60950-1, TUV CB Report; CE Mark, TUV CB Report transfer global
EMC markings	208 V FCC Class A, EN55022 Class A; BSMI, CNS14757-2, Class A 230 V: CE (per IEC/EN62040-2:Emissions, Category C2; Immunity, Category C2); VCCI, Class A; C-Tick, AS/NZS 3548, Class A; IEC61000-3-2:2000; IEC61000-3-3: 2004; ICES Canada

IBM 6000 VA LCD 4U Rack options at a glance

External Battery Module (EBM)

Part number	69Y1984
Form factor	4U
Battery information	(18) 12 V, 9 Ah, sealed, lead acid, maintenance free
Weight	EBM: 59 kg/130 lb; Packaging weight: 70 kg/154 lb
Dimensions (W x H x D)	438 x 127 x 706 mm/17.25 x 5 x 28 in.

Network Management Card (NMC)

Part number	46M4110
-------------	---------

Environmental Monitoring Probe

Part number	46M4113
-------------	---------

IBM 6000 VA LCD 4U Rack UPS Runtime Chart

Load			Run time in minutes	
Percent Load	VA	Watts	Standard Internal Batteries*	+ 1 EBM*
25%	1500	1400	51	112
50%	3000	2800	21	51
75%	4500	4200	12	31
100%	6000	5600	8	19

For more information

To learn more about the IBM 6000 VA LCD 4U Rack UPS, visit ibm.com/systems/x/hardware/options/ or contact your IBM marketing representative or IBM Business Partner.



© Copyright IBM Corporation 2010

IBM Systems and Technology Group
Route 100
Somers, NY 10589

Produced in the United States of America
September 2010
All Rights Reserved

IBM, the IBM logo, ibm.com, BladeCenter and System x are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at ibm.com/legal/copytrade.shtml

Other company, product or service names may be trademarks or service marks of others.

* Battery backup times are approximate and may vary with equipment, configuration, battery age, temperature, etc.



Please Recycle
