



Highlights

- Provides up to 3000 VA/2700 W in only 3U 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 3000 VA LCD 3U 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 both small and medium and large enterprise businesses. Selecting the right Uninterruptible Power Supply (UPS) can efficiently, reliably and affordably help protect against these costly incidents.

The IBM 3000 VA LCD 3U Rack UPS provides smart energy management and the high-level power protection that today's IT infrastructures require.

Delivering up to 2700 watts of power in 3U of rack space, this 3000 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 3U 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 3000 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 3000 UPS, delivering hours of backup time to critical systems during a prolonged power outage.



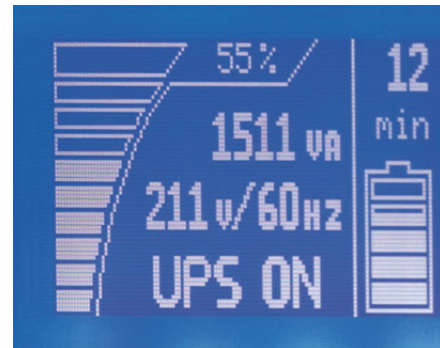
The IBM 3000 UPS delivers up to 3000 VA/2700 W of advanced power protection in a space-saving 3U rack design.

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 3000 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 3000 UPS is equipped with two cascadable REPO ports enabling the UPS to be remotely switched off in the event of an emergency.

Intuitive UPS management

The intelligent display of the IBM 3000 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 3000 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 3000 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 data center for optimal energy-efficiency, migrating workloads to eliminate hot spots or transferring work from underutilized systems to conserve energy.




Simplified deployment

The IBM 3000 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 3000 Rack UPS technical specifications

| |  |  |  |
|---|---|--|---|
| IBM model number | LCD 3U Rack UPS (100/120 V) | LCD 3U Rack UPS (200/208 V) | LCD 3U Rack UPS (230 V) |
| IBM part number | 53953AX | 53953JX | 53953KX |
| VA/Watts rating | 2880 VA/2700 W (120 V) 2300 VA/2300 W (100 V) | 3000 VA/2700 W | 3000 VA/2700 W |
| Nominal output voltage (V ac) (autosensing at first power-up) | 100/120 V | 208 V | 230 V |
| Waveform type | Sine wave | | |
| Output connections (All output receptacles are controllable via Two-Load Groups (segments)) | (1) NEMA L5-20R (2) NEMA 5-20R (2) IEC 320 C19 (2) IEC 320 C13 | (2) NEMA L6-20R (2) IEC 320 C19 (2) IEC 320 C13 | (2) IEC 320 C19 (8) IEC 320 C13 |
| Nominal output voltage (V ac) | 92 - 108 V (100 V) 106 - 132 V (120 V) | 184 - 228 V (208 V) | 208 - 253 V (230 V) |
| Input | | | |
| Nominal input voltage | 100/120 V | 208 V | 230 V |
| Input frequency (autosensing) | 50/60 Hz +/- 3 Hz | | |
| Input connection type | NEMA L5 - 30P | IEC 320 - C20 | IEC 320 - C20 |
| Input cords | NEMA L5 - 30P 2.0 m | IEC 320 C19 to NEMA L6-20P, 4.3 m IEC 320 C19 to LP-3, 4.3 m (Taiwan) | Optional Country Specific Line Cords |
| Input voltage range, mains operations | 84 - 121 V for 100 V 97 - 145 V for 120 V | 155 - 255 V for 208 V | 160 - 286 V for 230 V |
| Batteries | | | |
| Typical backup times | 14 minutes (at 50% rated W) 5 minutes (at rated W) | | |
| Battery type | Valve Regulated Lead Acid (VRLA)—maintenance free, sealed, leak proof | | |
| Optional external battery pack | Yes | | |
| Typical recharge time | 4 hours to 90% charge from a UPS/battery discharge of 50% rated load | | |

IBM Systems and Technology Group
Data Sheet

IBM 3000 Rack UPS technical specifications

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 | 1200J | 2400J | 2400J |
| Filtering | ANSI/IEEE C62.41; 1991 CATEGORYB3 (SURGE) | | |

Physical

| | |
|------------------------|---|
| Rack height | 3U |
| Dimensions (H x W x D) | 5 x 17.2 x 20.8 in./127x 438 x 527.2 mm |
| Product weight | 88 lb/40 kg |
| Packaging weight | 50 kg |
| Color | IBM black bezel |

Environmental and Safety

| | |
|--|--|
| Audible noise, 1 meter from unit surface | Normal operation at rated load and Battery Discharge Mode <55 dbA For load <70% <50 dbA |
| Efficiency | 95% minimum at full-rated load—normal usage, not during battery recharge |
| Operating temperature | 0°C (32°F) to +40°C (104°F) |
| Maximum operating altitude | 10,000 ft/3048 m |
| Relative humidity | 0-95% noncondensing |
| 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 | 100/120 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 3000 options at a glance

External Battery Module (EBM)

| | |
|------------------------|---|
| Part number | 69Y1982 |
| Form factor | 3U |
| Battery information | (8) 12 V, 9 Ah, sealed, lead acid, maintenance free |
| Weight | 119 lb |
| Dimensions (W x H x D) | 5 x 17.2 x 20.8 in. / 127 x 438 x 527.2 mm |

Network Management Card (NMC)

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

Environmental Monitoring Probe

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

IBM 3000 120 V UPS Runtime Chart

| Load | | | Run time in minutes | |
|--------------|------|-------|------------------------------|----------|
| Percent Load | VA | Watts | Standard Internal Batteries* | + 1 EBM* |
| 25% | 720 | 678 | 42 | 156 |
| 50% | 1440 | 1350 | 14 | 62 |
| 75% | 2160 | 2060 | 10 | 42 |
| 100% | 2880 | 2700 | 5 | 27 |

IBM 3000 208 V UPS Runtime Chart

| Load | | | Run time in minutes | |
|--------------|------|-------|------------------------------|----------|
| Percent Load | VA | Watts | Standard Internal Batteries* | + 1 EBM* |
| 25% | 710 | 660 | 41 | 153 |
| 50% | 1420 | 1340 | 14 | 68 |
| 75% | 2140 | 2040 | 10 | 43 |
| 100% | 2810 | 2660 | 5 | 29 |

IBM 3000 230 V UPS Runtime Chart

| Load | | | Run time in minutes | |
|--------------|------|-------|------------------------------|----------|
| Percent Load | VA | Watts | Standard Internal Batteries* | + 1 EBM* |
| 25% | 710 | 670 | 41 | 156 |
| 50% | 1450 | 1350 | 14 | 81 |
| 75% | 2160 | 2020 | 10 | 41 |
| 100% | 2880 | 2680 | 5 | 27 |

For more information

To learn more about the IBM 3000 VA LCD 3U Rack UPS, visit ibm.com/systems/x/hardware/options/ or contact your IBM marketing representative or IBM Business Partner.



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IBM Systems and Technology Group
Route 100
Somers, NY 10589

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



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