

IBM UPS10000XHV Uninterruptible Power Supply Solution



The IBM UPS10000XHV

Highlights

- **Hot-swappable batteries help maximize uptime and availability**
- **Support for 10000VA and 8000W translates into up to a .8 power factor**
- **Support for the IBM UPS Extend Run External Battery Pack—may add more than 35 minutes of battery operations at full load**
- **Space-saving 6U form factor for rack mounting or tower**
- **Choice of serial, USB or LAN connectivity for management**

Designed to provide more power and performance, with a smaller package and price

Help increase the availability and reliability of your business-critical data with the new IBM® UPS10000XHV uninterruptible power supply (UPS). Designed by IBM to meet customer requirements for high-density and cost-effective power management, UPS10000XHV products are intended to deliver more features and better performance at a lower price per watt than previous UPS models offered by IBM. Plus, the UPS10000XHV packs all this into a space-efficient 6U form factor that converts easily from rack to tower configurations.

IBM @server™ xSeries® UPS carry the IBM brand.

The IBM UPS10000XHV provides the benefits of IBM's renowned service and worldwide support, plus a set of innovations and features that are available exclusively from IBM.

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Designed for high availability
This innovative UPS solution incorporates design advances that help boost uptime and simplify management. Battery packs are hot-swappable, facilitating fast, safe and easy replacement of components.

In the rare event that the electronics of a UPS should fail, there is no need to unplug the servers or take them offline to replace the UPS. Devices stay plugged in, and power sourcing is designed to automatically switch to line current and back again—to keep systems up and running. This feature is commonly reserved for high-end, higher priced UPS products.

Plus, the IBM UPS10000XHV helps protect your data and IT systems with full-time surge suppression, automatic voltage regulation and noise filtering.

Optional battery packs help increase uptime

The 10000XHV allows the attachment of up to four UPS Extend Run Battery Packs, which means you may now have more than 35 minutes of additional run time during a power crisis. The Extend Run Battery Packs are 3U in height and hot-swappable, allowing for the easy addition of run time to a configuration of 10000XHV UPS's.

Rich power-management solutions

Power management is critical in today's environment. The IBM UPS10000XHV comes complete with a suite of easy-to-use software that allows management of the UPS either locally, with the standard serial or USB connectors, or remotely using the built-in 10/100baseT Network Management Card.

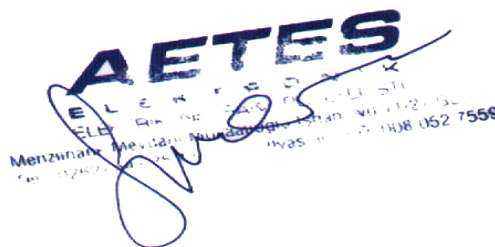
Using the browser-based management functions, you can cycle power to attached servers, configure systems for graceful shutdown, monitor power and UPS status or view power quality records. You can also integrate power management with IBM Director and control your rack environment from a single console.

The UPS10,000XHV is a 6U rack-ready UPS product that supports preconfigured shipment in an IBM rack. It is also designed for scalability, allowing you to use the UPS unit and its external battery packs in configurations for multiple UPS's.

High-voltage model

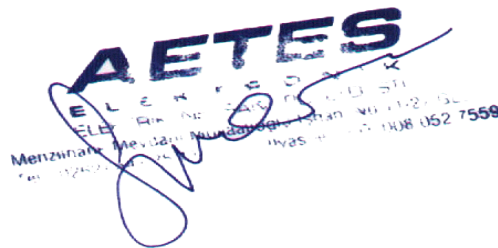
The IBM UPS10000XHV is available as a high-voltage version only. The 200-240V UPS10000XHV supports up to four devices and provides selectable nominal output at 200, 208, 220, 230 and 240V. The IBM 10000XHV UPS must be hardwired directly into your room power source. There is no plug included in the ship group.

A powerful relationship
UPS10000X products are designed by IBM and manufactured to our demanding specifications by American Power Conversion (APC), a worldwide leader in power management and our longtime power management provider. This means you get IBM service, support, warranty¹ protection and years of experience along with APC's knowledge of UPS manufacturing and management software.



IBM UPS10000X at a glance

Model	UPS10000XHV
Part number	21308RX
Form Factor	6U rack-mountable
Rated output	200V; 208V; 220V; 230V; 240V Current 50 A single phase; 18 A / phase three phase when on-line, 50A on L1 when in bypass
Input inlet/Current	• None - must be hard wired directly into room power supply
Input frequency	47-63Hz (auto adjusting)
Efficiency	• On line: 96%; On battery: 98%
Connections for management	USB, serial, and 10/100 baseT Network card
Outlets	• 4 IEC 320-C19, individually breakered
Software included	PowerChute Business Edition for IBM, PowerChute Network Shutdown for IBM
Software support	Microsoft® Windows 2003® 4.0, Windows® 2000, Windows XP, Novell NetWare 6.0, Red Hat Linux™ 7.3
Battery backup times	• Internal battery provides approximately seven minutes of run time at a load of 6000W • Supports up to four Extend Run Battery Packs for up to 37 additional minutes of run time
Weight	109kg (240 lbs), 118kg (260lbs) Shipping
Dimensions (HxWxD)	267 x 430 x 685 mm (16.5x23.5x36.6in)
Color	Black
Warranty¹	3-year limited onsite warranty
General features	Emergency power off, optional UPS Extend Run external battery packs, hot-swap batteries, integrated network management, intelligent battery management, overload indicator, rack mount, replace-battery indicator, resettable circuit breaker, status indicator LEDs
Environmental	Temp: 0-40C (32-104F) Relative humidity: 0-95% Altitude (max): 3000m (10,000ft)
Configuration aid	IBM @server™ xSeries® Rack Configurator at ibm.com/pc/us/eserver/xseries/library/configtools.html
Approvals	FCC, UL 1778, CSA C22.2 Number 950, NOM, CE-Mark (EN55022 Class A), C-Tick Mark (AS/NZS 3548 Class A), VDE EN50091-1-1 and 60950
Ship group components	Rail set, accessory kit, UPS serial cable, UPS cable, EPO cable, four rack jumper cords, documentation and software CDs.





Extend Run Battery Pack options at a glance

Part number	25R5582
Form Factor	3U rack-mountable, ship-loaded approved
Battery information and run times	<ul style="list-style-type: none"> • 4 hot-swappable battery units per Extend Run Battery Pack • Each additional Extended Run Battery Pack supports run times of up to 20 minutes of extra run time at full load
Weight	86.0kg (190 lbs)
Dimensions (HxWxD)	133 x 430 x 685mm (5.25x16.9x26.9in)

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¹For terms and conditions or copies of the IBM limited warranty, call 1 800 772-2227 in the U.S. and in Canada call 1 800-426-2255. Limited warranty includes International Warranty Service in those countries where this product is offered. Registration is required. Telephone support may be subject to additional charges. For warranties including on site service, IBM sends a technician after attempting to resolve the problem remotely.

²Battery run times are estimates based on IBM testing, actual times will vary depending on many factors including battery age, temperature, maintenance, etc.

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Battery Run Table

The dark gray shaded area in the chart represents minutes, the other areas represent hours

Note: The recharge time is the approximate time it takes to get to 90% capacity from a complete discharge at a 50% load.

Load (W)	Number of Battery Packs			
	Internal	+1	+2	+4
50	7.56	13.83	21.55	37.68
100	6.00	10.93	17.06	29.83
200	4.16	7.65	11.93	20.90
300	3.16	5.83	9.11	16.00
400	2.55	4.68	7.35	12.88
500	2.11	3.91	6.12	10.75
600	1.80	3.33	5.24	9.21
700	1.56	2.90	4.56	8.03
800	1.38	2.56	4.05	7.11
900	1.23	2.30	3.61	6.38
1000	1.16	2.08	3.28	5.78
1200	55	1.73	2.73	4.85
1400	47	1.50	2.35	4.16
1600	41	1.28	2.05	3.63
1800	36	1.13	1.81	3.23
2000	32	1.00	1.61	2.90
2500	24	48	1.28	2.28
3000	19	39	1.05	1.88
3400	17	34	55	1.65
4000	13	28	46	1.36
5000	10	21	35	1.06
6000	7	16	28	52
7000	5	13	23	44
8000	4	11	20	37

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