HP R5000 Rackmountable Uninterruptible Power System

Data sheet

The R5000 UPS utilizes a new industry-leading technology that continually conditions and regulates power without using the battery, thereby increasing the life of the battery to lower cost of ownership. Moreover, the output voltage is automatically regulated, based on the connected load and the input voltage for easier deployment and better performance.

Key benefits

Lower cost of ownership with innovative technology
The Minimally Switched Technology used in the new HP R5000 UPS improves the performance over traditional line-interactive UPS designs while reducing the cost, weight, and size of traditional double-conversion online UPS designs.

More power in less space
Rated near unity at 5000 VA/4500 watts, the R5000 UPS packs more power in space-conserving rackmount design to allow you to support more critical equipment in your rack.

Increased flexibility
Four C13, four C19 and an L6-30R outlet on the NA/Japan model and four C13, four C19 and an IEC 32 amp outlet on the international model provide wide range of connection options. Adding the optional HP PDU Extension Bar, part number AF500A, gives additional C13 outlets making the R5000 an extremely flexible UPS for all environments.

Easy configuration via enhanced front panel display
LCD system integrated into the front panel delivers valuable information to manage and configure the UPS, support diagnostics and troubleshooting without requiring users to log into a networked monitoring station.

Independently Controllable Load Segments
With two load segments, you have the flexibility to configure scheduled startups and shutdowns, in addition to independently control the separate load segments. Working in conjunction with the HP UPS Management Module, the R5000 can be configured to extend the runtime for more critical devices.

Remotely monitor UPSs on the network
The installed UPS Network Module enables network administrators to remotely monitor UPSs and reboot network devices. It provides SNMP functionality, including power event alerts, network power diagnostics, and remote UPS reboot and testing. Used in conjunction with HP Systems Insight Manager or other SNMP capable Network Management Software, power-related problems on the network are quickly discovered and remedied.

Increase system uptime with ERMs
ERMs are rack mounted battery modules that occupy 3U of rack space. The HP R5000 UPS supports up to four ERMs, which extend your overall battery runtime.

R5000 UPS Technical specifications

Model number	R5000 NA/Japan	R5000 International
Part number	AF460A	AF461A
Description	5000 VA/4500 Watts Rackmount UPS, NA/Japan	5000 VA/4500 Watts Rackmount UPS, International
Mechanical		
Unit dimension	5.5 x 17.2 x 29.3 in. / 12.7 x 43.7 x 74.4 cm	
Unit weight	126 lbs / 57 kg	
BTU break down	478	
Electrical input		
Voltage range	160-253V at 200/208V nominal	160-253V at 220, 230 and 240V nominal
Frequency	50/60 Hz	
Input plug	L6-30P, 3m cord	IEC 309 32 Amp, 3m cord
Online efficiency	94%	
REPO	Remote Emergency Power-Off disables AC power to load	
Electrical output		
Online regulation	-10% to +6% of nominal voltage	
On battery regulation	±5% of nominal voltage	
Voltage wave form	Sine wave	
Electrical output		
Maximum wattage based on voltage input	200-240V: 7200 VA/7200W	220V: 6100 VA/6100W 230V: 6300 VA/6300W 240V: 6500 VA/6500W
Output connection	LS1: 15A CB – 2 x C19 + 2 x C13 plus one pigtailed receptacle 1 x L6-30R LS2: 15A CB – 2 x C19 + 2 x C13	LS1: 15A CB – 2 x C19 + 2 x C13 plus one pigtailed receptacle 1 x IEC 309 32A LS2: 15A CB – 2 x C19 + 2 x C13
Output protection	Re-settable circuit protectors	
Battery		
Type	Maintenance-free, sealed, valve-regulated lead acid (VRLA)	
Extended batteries	Up to four ERMs supported. ERM part number is AF464A	
Backup time	See Backup Times Chart	
Recharge Time	<3 hours to 80% usable capacity. <48 hours for complete recharge	
Battery string voltage	216V	
Battery type	12V 27W	
Battery quantity	18	
Communications		
Serial ports	Standard DB-9 ports (ships with communication cable)	
Included	HP UPS Network Module	
LED indicators	LCD and switch membrane integrated into the front panel; with four-button control (three buttons for UPS power control and one button under the front bezel for configuration)	

R5000 UPS Technical specifications continued

Model number	R5000 NA/Japan	R5000 International
Environmental and safety		
Operating temperature	50 to 104°F (10 to 40°C)	
Transit temperature	-13 to 131°F (-25 to 55°C)	
Storage temperature	32 to 77°F (0 to 25°C)	
Operating humidity	20% to 80% (non-condensing)	
Storage humidity	5 to 95%	
Operating altitude	Up to 6,562 ft (2000m) above sea level	
Transit altitude	49,212 ft (15,000 m) above sea level	
Audible noise	<45 db (in normal operation)	
Safety marking	UL, cUL	GS, CE, GOST
Safety certifications	UL1778, UL60950-1; CSA22.2 No.107.3, No.60-1950; EN50091-1-1;EN60950-1 IEC62040-1-1	
EMC markings	FCC, VCCI, ICES, CISPR	BSMI, C-Tick, CISPR
Emissions	FCC CFR 47, Part 15 Class A, EN50091-2	
Immunity	IEC 801-2, IEC 801-3, IEC 801-4, IEC 801-5	
REPO Port	Meets NEC code 645-11 intent and UL requirements	
Environment-friendly products and approach		
End-of-life Management and Recycling	Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: http://www.hp.com/go/green. To recycle your product, please go to: http://www.hp.com/go/green or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner. The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/green. These instructions maybe used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.	

Estimated Backup Times Chart (in minutes)

Load (percent)	Internal batteries	+1 Extended Runtime Module	+4 Extended Runtime Modules
20	44	143	436
50	16	44	145
80	7	25	83
100	6	20	64

Backup times are estimated for typical applications. Actual performance will depend on load and battery conditions.

Right –size your power backup

Do you need to find the correct HP UPS for your system? Just visit **www.upssizer.com** and select the right HP Tower and Rackmountable UPS in two easy steps:

1. Determine the group of devices you need to protect.
2. Specify your UPS requirements such as input voltage, required backup time, and provisions for future growth.

The HP UPS sizer selects the most suitable UPS solution for your needs and shows the technical specifications of the recommended UPS.

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When technology works, business works.
When you buy HP ProLiant Options for your HP ProLiant servers, you should also think about services.

Recommended HP Care Pack Services
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Related HP Care Pack Services
3-Year HP 6-hour Hardware Support Onsite Call-to-Repair Service
HP Proactive Select Service

All support services come with Insight Remote Support, available at no additional cost, delivering remote monitoring, diagnosis and problem resolution.

Coverage: For ProLiant services, care pack services provide cover for HP-branded hardware options qualified for the server, purchased at the same time or afterward, internal to the enclosure, as well as external monitors up to 22" and tower UPS products, these items are covered at the same service level and for the same coverage period as the server unless either the maximum supported lifetime or the maximum or both usage limitation has been exceeded. Coverage of UPS battery is not included; standard warranty items and conditions apply.

For more information, visit
www.hp.com/services/proliant
www.hp.com/services/bladesystem

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