Powerware 5125 UPS family

Features

- Protects connected equipment from common power anomalies including surges, sags, brownouts, and over-voltage
- Provides more real wattage in less space with a .9 power factor protecting more equipment and leaving more room for expansion. Available in two-in-one form factor (1000-3000 VA) and rackmount (5000/6000 VA) products
- Offers the choice of rackmount or tower installation—space-saving 2U packaging for 1000-3000 VA, 3U for 5000/6000 VA models including batteries
- Increases battery life through microprocessor-controlled Advanced Battery Management (ABM®) technology
- Enables prioritized shutdown of non-essential equipment during outages to maximize backup time for critical devices
- Increases uptime with hot-swappable batteries and electronics, without interrupting power to connected systems (2400–6000 VA models)
- Ensures data and system integrity with a complete suite of power management software and connectivity options
- Provides a two-year limited warranty with next business day replacement, 10-year pro-rated warranty, and \$25,000 load protection guarantee; optional Gold Plans available (US and Canada*)



Powerware 5125 tower model 1000 to 2200 VA

Powerware 5125 two-in-one form factor 1000 to 3000 VA

Introducing the expanded Powerware 5125 family of UPSs

The Powerware[®] 5125 family of uninterruptible power systems (UPSs) resolves the five primary problems with incoming utility power—outages, sags, surges, brownouts, and over-voltage conditions—and supplies clean, conditioned power to all connected equipment. It also offers varying degrees of protection from other problems, such as line noise, frequency variation, harmonics, and switching transients.

Incorporating more than 40 years of UPS design experience, Powerware 5125 UPSs deliver power protection for PC/workstation clusters, enterprise networking systems, server farms, and data center systems—anywhere continuous, clean power must be provided in a compact package at an affordable price.

This proven family of UPSs—which already included models for 1000-3000 VA—has been expanded with new 5000 VA and 6000 VA models that offer space-saving designs and innovative features at competitive prices to deliver greater return from your IT investment.

Power more servers in less space

Powerware 5125 models in the 1000-3000 VA range only occupy 2U. For maximum deployment flexibility, the standard chassis (available in beach gray or black) can be deployed as a tower unit or in a rack.



Powerware 5125 rackmount 5000 to 6000 VA

	Snapshot
Power Rating:	1000-2200 VA tower models 1000-3000 VA - two-in-one models (rackmount and tower)
Voltage: Frequency:	5000-6000 VA rackmount models 200, 208, 220, 230, 240 Vac 50/60 Hz (auto-sensing)
Configuration:	tower, two-in-one form factor or rackmount

Up to 6000 VA of UPS power is packed into three units (3U) of rack space—a mere 5.25" high, including batteries. This space-saving 3U design is one of the most power-dense 5000-6000 VA UPSs you can buy. That means more rack space is available for other critical equipment, such as servers, disk arrays, and extra batteries.

In addition to occupying less rack space than competing alternatives, Powerware 5125 UPSs deliver significantly more wattage—more power to protected equipment for the same utility dollar. The new Powerware 5125 5000 VA and 6000 VA models power 30 percent more servers in 40 percent less space compared to the leading competitive offering.

The difference is a .9 power factor—a measure of apparent power versus real power. By delivering more real output power, the Powerware 5125 can actually power more servers than another UPS of equivalent VA rating. This feature applies to twoin-one and rackmount models.

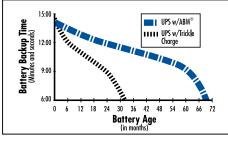


Line-interactive design shields systems from silent threats

The line-interactive 5125-series UPSs regulate voltage by boosting input utility voltage up or moderating it down as necessary before allowing it to pass to the protected equipment.

And if input voltage varies as much as 20 percent over nominal voltage or 30 percent under-which can easily happen when running on generator power—the Powerware 5125 accepts this inconsistent voltage and delivers clean, consistent output.

Unlike typical line-interactive systems, Powerware 5125 UPSs do not switch back and forth to battery power to accomplish this (which would shorten battery life and increase battery replacement costs), and do not send disruptive voltage spikes when boosting power up to specification.



Data based on tests performed by an independent battery manufacturer.

Extend battery life with Advanced Battery Management (ABM®) technology

Most UPS manufacturers in the market today offer batteries that are constantly 'trickle-charged'-a process that degrades the battery's internal chemical composition, reducing potential battery service life by as much as 50 percent. In contrast, Powerware ABM technology uses sophisticated sensing circuitry and an innovative three-stage charging technique that increases the useful service life of UPS batteries while optimizing battery recharge time.

The Powerware 5125 provides up to 60 days' notice of the end of useful battery service life, to allow ample time to hot-swap batteries without ever having to shut down connected equipment.

Add battery modules for even more backup capacity

Up to four Extended Battery Modules can be added to provide additional battery backup capacity as necessary. Batteries are hot-swappable and can be replaced at any time without interrupting UPS operation and load protection.

Extended Battery Modules are available in three forms: tower models, 2U and 3U rackmount models, designed to install tightly in tandem with the UPS for a clean look that enhances the appearance of the data center while saving precious space.

Powerware 5125 Battery Runtime Chart (minutes full/half load)							
Load VA	Internal	1 EBM	2 EBMs	3 EBMs	4 EBMs		
Tower models							
1000	5/14	25/60	55/170	83/199	109/228		
1500	6/17	33/79	63/146	92/174	120/201		
2200	5/14	26/60	55/170	81/198	106/224		
Two-in-one (rackmount and tower) models							
1000	7/19	33/68	58/120	82/166	105/214		
1500	5/13	23/57	49/161	73/172	96/205		
2400	7/19	35/73	60/124	85/177	110/229		
3000	5/15	25/61	49/103	69/146	90/190		
Rackmount models							
5000	7/19	24/61	46/106	67/156	89/210		
6000	5/15	19/49	36/85	53/125	71/168		

* Up to 4 EBMs can be connected to all models. EBM run times include internal batteries. Run time chart provides typical information. Battery run times are approximate and may vary with equipment, configuration, battery age, temperature, etc.

Load Segments feature maximizes battery backup for critical systems

Using Powerware LanSafe power management software, you can independently control "Load Segments," which are groups of receptacles on the rear panel of the Powerware 5125 UPS. This feature enables you to manage scheduled shutdowns and sequential startups of protected loads. During a power outage, you could shut down power to non-

critical devices (Load Segment 2), thereby extending battery backup time available for critical devices (Load Segment 1). When the Load Segments feature is used with Powerware connectivity cards, users can remotely re-boot locked-up network equipment. Simply connect to the interface card over the network, and toggle the passwordprotected Load Segment controller to get your network back online.



Load Segment 1 with critical equipment Load Segment 2 with less critical

Powerware 5125 tower model 1000 to 2200 VA

equipment

Hot-swappable battery modules when batteries reach the end of their useful life, replace battery modules without powering down connected equipment (available on all models)

Hot-swappable electronic modules - replace electronics modules without shutting down connected equipment (available on 2400 VA to 6000 VA models)



Easily service the UPS without interrupting power to protected systems

LEDs on the front panel of the Powerware 5125 indicate the presence of alarm conditions, battery utilization, bad or low batteries, site wiring faults, and incoming utility power, as well as current load levels relative to UPS capacity.

When batteries reach the end of their useful life, or electronics modules require service, replacement is easy. With simple access through the front panel, users can install new battery and electronics modules without ever powering down connected servers or removing the unit from the rack.

The key is an internal automatic bypass feature (available on 2400 VA-6000 VA models) that allows the UPS to continuously provide power to critical equipment while you're working on the system. Even if you pull out the electronics, the UPS keeps doing its job.

Connectivity options offer maximum flexibility

Connectivity options are available to suit nearly any communication requirement. The standard unit is equipped with a RS-232 serial communications port and a built-in USB port (5000 and 6000 VA models) to interface with power management software. You can customize your UPS by adding any of the following X-slot interface options for other types of communications:

ConnectUPS Web/SNMP Interface Card

enables direct control and monitoring in SNMP-based networks, plus the ability to monitor UPS status and meters through a Web browser (includes built-in switch hub)



Multi-server Card enables up to six serially connected devices of mixed operating systems to be independently managed and controlled by a single UPS



- Relay Interface Card provides dry-contact interface between the UPS and any relayconnected device, including the IBM® eServer® iSeries (AS/400) and a variety of industrial applications
- Environmental Monitoring Probe (EMP) works with the ConnectUPS Web/SNMP card, remotely monitoring temperature, humidity, and the status of two contacts/sensors, such as smoke detector and open-door detector





Web/SNMP card

EMP

rackmount hardwired model



Powerware 5125 2U and 3U rackmount models

Power management software unifies and centralizes UPS management

Every Powerware 5125 UPS comes with a CD that includes multimedia demonstrations, product data sheets, and the following power management software:

 Free LanSafe power management software for network shutdown



 30-day trial version of Powerware PowerVision[®] UPS performance analysis and monitoring software

Powerware LanSafe power management software gives you control and visibility over all your UPS systems, using an intuitive, graphical interface and SNMP (Simple Network Management Protocol). Using Powerware's innovative power management software, you can securely monitor UPS and battery performance over your LAN or the Web, establish prioritized shutdown of network devices and client/server applications, test all networked UPS systems from one node, analyze trends and network conditions, and stay informed of potential power problems by pager and email.

Gain a new level of confidence

The culmination of 40 years of R&D excellence, the newly expanded Powerware 5125 UPS family delivers confidence—confidence that your organization's critical electronics are protected by reliable and effective lineinteractive protection, and confidence that Powerware will be there with you for the long term with warranty coverage and expert technical support.

Powerware offers a comprehensive, two-year limited warranty covering parts and labor. For warranty service on your Powerware 5125, we will ship a replacement unit via overnight express.

For added confidence, your Powerware 5125 UPS is also covered by a 10-year pro-rated warranty and \$25,000 load protection guarantee.

To find out more, visit our Web site at www.powerware.com, or contact us at 1-800-356-5794.

Powerware Recommends

1	Software	Connectivity	Service	System Solutions
	> Powerware LanSafe power management software ensures data integrity; free updates available	USB	 > Gold Plan > Gold Plan Plus Enhance your power system maintenance coverage with Gold Plan or Gold Plan Plus service 	 > Extended Battery Modules > Power Distribution Units

*See the Two-year Limited Warranty, the ten-year Pro-rated Warranty, and the Load Protection Guarantee for Powerware 5125 Products for details.

Powerware® 5125 Model Selection Guide

Model Number ¹	Power Rating (VA/Watt)	Input/Output Voltage (VAC)		Output Receptacles⁴	Dimensions HxWxD (in/mm)	Weight (lb/kg)	Part Number/ UPC Code
Tower Models (North A	merica)						
PW 5125 1000	1000/700	120	5-15P.	(6) 5-15R	9.45 x 6.38 x 15.79/	34.3/15.6	05146629-5501/
1 1 1 1 2 1 1 0 0 0	1000/700	120	6 ft line cord	(0) 5-151	240 x 162 x 401	54.5/15.0	790341032937
PW 5125 1500	1440/1050	120	5-15P,	(6) 5-15R	9.84 x 6.38 x 18.39/	50.7/23.0	05146632-5501/
VV 5125 1500	1440/1050	120	6 ft line cord	(0) 5-151	250 x 162 x 467	50.7725.0	790341032968
PW 5125 2200	1920/1600	120	5-20P,	(6) 5-15R,	9.84 x 8.07 x 19.41/	68.3/31.0	05146635-5501/
W 5125 2200	1520/1000	120	6 ft line cord	(2) 5-20R	250 x 205 x 493	00.5/ 51.0	790341032999
PW 5125 2200b	2080/1600	208	IEC-320-15A, inlet ³	(9) IEC-320-10A (C13)	9.84 x 8.07 x 19.41/ 250 x 205 x 493	68.3/31.0	05146636-5501/ 790341033002
Tower Models (Internat	tional)		inter		230 X 203 X 433		730341033002
	1000/700	220	150 220 104	(6) 156 220 104 (612)	0.45 (20 15 70 /	242/15 0	
PW 5125 1000i		230	IEC-320-10A, Inlet ³	(6) IEC-320-10A (C13)	9.45 x 6.38 x 15.79/ 240 x 162 x 401	34.3/15.6	05146630-5501/ 790341032944
PW 5125 1500i	1500/1050	230	IEC-320-10A, Inlet ³	(6) IEC-320-10A (C13)	9.84 x 6.38 x 18.39/ 250 x 162 x 467	50.7/23.0	790341032975/ 790341032975
PW 5125 2200i	2200/1600	230	IEC-320-10A, Inlet ³	(9) IEC-320-10A (C13)	9.84 x 8.07 x 19.41/ 250 x 205 x 493	68.3/31.0	05146637-5501/ 790341033019
Two-in-One (Rackmoun	t and Tower) Fo	rm Factor Mo		rica)	250 × 205 × 455		750541055015
PW 5125 1000 RM	1000/900	120	5-15P,	(6) 5-15R	3.5 x 17.0 x 19.4/	61.0/27.67	05146666-5501/
1000 KIVI	1000/900	120	6 ft line cord	(O) J-15K	3.5 x 17.0 x 19.4/ 89 x 432 x 494	01.0/2/.0/	790341033033
PW 5125 1500 RM	1440/1340	120	5-15P,	(6) 5-15R	3.5 x 17.0 x 19.4/	61.0/27.67	05146669-5501/
F VV 5125 1500 KIVI	1440/1540	120	6 ft line cord	(0) 3-13K	89 x 432 x 494	01.0/27.07	790341033064
PW 5125 2400 RM	2400/2250	120	L5-30P,	(1) L5-30R,	3.5 x 19.0 x 24.5/	89.0/40.40	05147564-5501/
F VV 5125 2400 KIVI	2400/2250	120	(12' attached)	(6) 5-15R	89 x 483 x 623	09.0/40.40	790341035310
PW 5125 3000 RM	2880/2700	120	L5-30P,	(1) L5-30R,	3.5 x 19.0 x 24.5/	89.0/40.40	05147152-5501/
900 5125 3000 RIVI	2000/2/00	120				89.0/40.40	
	the second The second The		(12' attached)	(6) 5-15R	89 x 483 x 623		790341035273
Two-in-One (Rackmoun	•		•	•			
PW 5125 1000i RM	1000/900	230	IEC-320-10A,	(6) IEC-320-10A (C13)	3.5 x 17.0 x 19.4/	61.0/27.67	05146667-5501/
			Inlet ³		89 x 432 x 494		790341033040
PW 5125 1500i RM	1500/1340	230	IEC-320-10A,	(6) IEC-320-10A (C13)	3.5 x 17.0 x 19.4/	61.0/27.67	05146670-5501/
			Inlet ³		89 x 432 x 494		790341033071
PW 5125 2400i RM	2400/2250	230	IEC-309 16A P,	(1) IEC-320-16A (C19)	3.5 x 19.0 x 24.5/	89.0/40.40	05147565-5501/
			(12' attached)	(9) IEC-320-10A (C13)	89 x 483 x 623		790341035327
PW 5125 3000g RM	3000/2700	200-240	IEC-320-16A,	(1) IEC-320-16A (C19)	3.5 x 19.0 x 24.5/	89.0/40.40	05147155-5501/
			receptacle	(9) IEC-320-10A (C13)	89 x 483 x 623		790341035297
PW 5125 3000e RM	3000/2700	230	IEC-320-16A,	(1) IEC-320-16A (C19)	3.5 x 19.0 x 24.5/	89.0/40.40	05147641-5501/
			receptacle	(9) IEC-320-10A (C13)	89 x 483 x 623		790341035921
PW 5125 3000i RM	3000/2700	230	IEC-309 16A P	(1) IEC-320-16A (C19)	3.5 x 19.0 x 24.5/	89.0/40.40	05147154-5501/
			(12'attached)	(9) IEC-320-10A (C13)	89 x 483 x 623		790341035280
Rackmount Models On	ly⁰						
PW 5125 5000 RM	5000/4500	200/208, 220,	L6-30P	L6-30R on short cord,	5.25 x 17.50 x 26.0/	161/73	103003611-5501/
		230, 240		(2) L6-20 (4) C13	133 x 445 x 661		790341043414
PW 5125 6000 RM HW	6000/5400	200-240	HW (terminal block)	HW, (4)C19, (4)C13	5.25 x 17.50 x 26.0/	161/73	103003610-5501/
W 5125 0000 RW 11W	0000/ 5400	200-240		1100, (4)(13, (4)(13	133 x 445 x 661	101//5	,
							790341043582
PW 5125 6000i RM	6000/5400	220, 230, 240	IEC309-32A	IEC309-32A on short	5.25 x 17.50 x 26.0/	161/73	103003612-5501/
				cord, (4)C19, (4)C13	133 x 445 x 661		790341043421
Optional Extended Bat	tery Modules (E	BMs)					
For use with PW 5125 24 V	EBM				9.84 x 6.38 x 18.66/	59.5/27.0	05146638-5501/
1000 VA tower models only	N/A	N/A	N/A	N/A	250 x 162 x 474		790341033088
For use with PW 5125 48 V					9.84 x 6.38 x 18.66/	59.5/27.0	05146639-5501/
1500/2200 VA tower models of		N/A	N/A	N/A	250 x 162 x 474		790341033095
For use with PW 5125 48 V EE					3.5 x 17.0 x 19.4/	65.0/29.5	05147148-5501/
		N/A	N/A	N/A	89 x 432 x 494		790341033101
1000/1500 VA RM models o					3.5 x 19.0 x 24.5/	121.0/54.9	05147156-5501/
	IVI		N 1 / A	N/A	89 x 483 x 622		790341035303
For use with PW 5125 120 R		N/A	N/A	11/7			
For use with PW 5125 120 R 2400/3000 VA RM models o For use with PW 5125	nly N/A						
1000/1500 VA RM models o For use with PW 5125 120 R 2400/3000 VA RM models o For use with PW 5125 240 EBM (beach grey) 5000/6000 VA RM models o	nly N/A	N/A N/A	N/A	N/A	5.25 x 17.50 x 24.75/ 133 x 445 x 629	169/76	103003387-5501/ 790341041007
For use with PW 5125 120 R 2400/3000 VA RM models o For use with PW 5125	nly N/A				5.25 x 17.50 x 24.75/	169/76 169/76	103003387-5501/

1. 50/60 automatic frequency selection. 2. 120 V models are 110 V, 120 V, 127 V user-selectable. 230 V models are 220 V, 230 V, 240 V user-selectable. 208 V models are 208 V, 220 V, 230 V, 240 V user-selectable. 208 V models are 208 V, 220 V, 230 V, 240 V user-selectable. 208 V models are 208 V, 220 V, 230 V, 240 V user-selectable. 208 V models are divided into (2) Load Segments (receptacle groups). 2200-3000VA models are divided into (3) Load Segments (receptacle groups). 500/6000VA models are divided into (2) Load Segments. Characteristic and the second segments (receptacle groups). 500/6000VA models are divided into (2) Load Segments (receptacle groups). 500/6000VA models are divided into (2) Load Segments (receptacle groups). 500/6000VA models are divided into (2) Load Segments (receptacle groups). 500/6000VA models are sold segments. Second groups). 500/6000VA models are 500 V A models A mod

Available Options	
Order Number	Description
05141562-0021	4-post rackmount kit (1000-3000 VA rackmount models) fits 19-inch racks
05146726-5501	2-post rack mount kit (1000-3000 VA rackmount models) fits 19-inch racks
05146871-5501	3-Slot seismic mounting kit (1000/1500 rackmount models only)
05146875-5501	5-Slot seismic mounting kit (1000/1500 rackmount models only)
05146447-5502	Multi-server card
05146508-5501	USB card
1018460	Relay card
103002974-5501	ConnectUPS Web/SNMP card
103002510-5501	Modbus card
103003637-5501	Environmental Monitoring Probe (EMP)
05146519-001	Powerpass Distribution Module (1000/1500 rackmount models only)
05146401-5501	Power Distribution Unit 250 VA 0U form factor. Side cabinet mount (5000/6000 VA)

Technical Specifications¹

Electrical Input	1000–2200 VA	2400–3000 VA	5000/6000 VA		
Nominal Voltage ²	120, 208 and 230 Vac ²	120, 208 and 230 Vac ²	200/208, 220, 230 and 240 Vac ²		
Input Voltage Ranges (for	low voltage	e: 77-152 V	160-288		
user-selectable voltages)	high voltage	e: 154-288 V			
Operating Frequency		50/60 Hz, auto-sensing	·		
Frequency Range	1	46-54 hz for 50 hz; 56-64 hz for 60 hz			
Electrical Output					
On Utility Voltage Regulation		-10% to +6% of nominal			
On Battery Voltage Regulation		±5% RMS			
Voltage Wave Shape (on battery)		sine wave			
Output Protection		short circuit protection			
Battery					
Battery Type		sealed, lead-acid; maintenance free			
Battery Runtime		see Battery Run Time table			
Battery Replacement	hot-swappabl	e internal batteries and external batteri	es modules		
Recharge Time		< 3 hours to 90% usable capacity			
Start-On-Battery	а	llows start of UPS without utility input			
General					
Electrical Power Module Replcmn	no	yes, hot-swap	yes, hot-swap		
Diagnostics		full system self-test on power up			
UPS Bypass	no bypass	interna	al bypass		
Transfer Time		4ms typical, 6ms max			
Dimensions and Weights		see Model Selection Guide			
Overload (normal operation)	110% overload, shutdown after 3 minutes	down after 3 minutes 100-102 % indefinite, 103-112% 2 minutes and			
-	150% overload, shut down 10 cycles > 112% 12 line cycles				
Communications					
User Interface	front control panel				
Audible Alarms	for various UPS alarm co	for various UPS alarm conditions, including: on battery, low battery, overload, UPS fault			
Network Transient Protector	UL 497 A, in/out jacks RJ45 (high voltage models No network protection) & RJ11 (low voltage models modem protection)				
REPO Port	meets N	NEC code 645-11 intent and UL requiren	nents		
Communication Ports	see Commu	nications Slot	native USB and serial port		
Communication Slot	RS-232 single serial module (standard) options available, see options chart		Web/SNMPxHub card factory installed; other options also available		
Cable	6-foot communications cable included				
Power Management Software	Powerware Software Suite CD-ROM (bundled with UPS)				
Environmental					
Safety Certifications	UL; cUL; NOM; C-Tick; CE marking		UL; cUL; NOM; C-Tick; CE marking TUV/VDE, GS		
EMC Compliance	FCC Part 15, EN50091-2, Class A for 2.2 KVA and RM; Class B for 1000 and 1500 VA tower models	FCC Part 15, EN50091-2, Class A			
Operating Temperature	0 to 40°C (32	to 104°F)	10°C to 40°C		
Storage Temperature	-15 to 50°C (5 to 122°F)		-25°C to 55°C		
Relative Humidity		0% to 95% non-condensing			
Lightning & Surge Protection	ANSI/IEEE C62.41 (IEEE 587), IEC61000-4-5				
Surge Energy Rating		high-energy 6500 A peak			
Audible Noise	less than 40 d	BA typical	less than 45 dBA typical		
Altitude		3000m (10,000 ft) without derating	· · ·		
	tice due to continuing product improvement programs. 2. See Model Selection Guide for user-selectable voltages.				

Powerware®, ABM® technology and PowerVision® are registered trademarks of Powerware Corporation©2004. IBM® and eServer® are trademarks of IBM Corporation.

Powerware

WORLDWIDE HEADQUARTERS 8609 Six Forks Road Raleigh, NC 27615 U.S.A. Toll Free: 1.800.356.5794 or 919.872.3020 www.powerware.com

CANADA Ontario: 416.798.0112

5125FXA Revision 06/04 Reprint 06/04 EUROPE/MIDDLE EAST/AFRICA Denmark: 45.3686.7910 Finland: 358.94.52.661 France: 33.1.6012.7400 Germany: 49.7841.666.0 Italy: 39.02.66.04.05.40 Norway: 47.23.03.65.50 Sweden: 46.8.598.940.00 United Kingdom: 44.1753.608.700

ASIA PACIFIC Australia/NZ: 61.2.9878.5000 China: 86.21.6361.5599 HK/Korea/Taiwan: 852.2745.6682 India: 91.11.2649.9414 to 18 Singapore/SEA: 65.6829.8888 LATIN AMERICA Argentina: 54.11.4343.6323 Brazil: 55.11.3616.8500 México: 52.55.9171.7777