# 5125 Family Uninterruptible Power System



1000 to 2200 VA



5125 rackmount 5000 to 6000 VA

Now featuring a 3-year warranty with product registration!

#### **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 tower (1000-2200 VA) and rackmount (5000/6000 VA) products
- Offers the choice of rackmount or tower installation—space-saving 3U for 5000/6000 VA models—including batteries
- Increases battery life through microprocessor-controlled 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 (5000–6000 VA models)
- Ensures data and system integrity with a complete suite of power management software and connectivity options
- Provides a three-year limited warranty (with product registration) with next business day replacement and \$150,000 load protection guarantee; optional Gold Plans available (US and Canada\*)

#### **Product Snapshot**

Power Rating: 1000-2200 VA tower models

5000-6000 VA rackmount models

Voltage: 120, 208, 220, 230, 240 Vac Frequency: 50/60 Hz (auto-sensing) Configuration: tower, or rackmount

# Introducing the expanded 5125 family of UPSs

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, 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.

These UPSs offer space-saving designs and innovative features at competitive prices to deliver greater return from your IT investment.



### Power more servers in less space

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, 5125 UPSs deliver significantly more wattage—more power to protected equipment for the same utility dollar. The 5125 5000 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 5125 can actually power more servers than another UPS of equivalent VA rating. This feature applies to two-in-one and rackmount models.

# Line-interactive design shields systems from silent threats

The line-interactive 5125 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 5125 accepts this inconsistent voltage and delivers clean, consistent output.

Unlike typical line-interactive systems, 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.

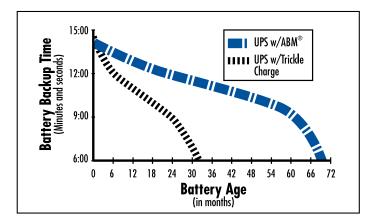
### Extend battery life with ABM technology

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, ABM technology uses sophisticated sensing circuitry and an innovative three-

#### 5125 BATTERY RUNTIME CHART (IN MIN, 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
Rackmount models					
5000	7/19	24/61	46/106	67/156	89/210
6000	5/15	19/49	36/85	53/125	71/168

<sup>\*</sup> Up to 4 EBMs can be connected to all models. EBM runtimes include internal batteries. Runtime chart provides typical information. Battery runtimes are approximate and may vary with equipment, configuration, battery age, temperature, etc.



stage charging technique that increases the useful service life of UPS batteries while optimizing battery recharge time.

The 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 two forms: tower models 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.

# Load segments feature maximizes battery backup for critical systems

Using NetWatch protection software, you can independently control load segments, which are groups of receptacles on the rear panel of the 5125. This feature enables you to manage scheduled shutdowns and sequential startups of protected loads. During a power outage, you could shut down power to noncritical devices (load segment 2), thereby extending battery backup time available for critical devices (load segment 1). When the load segments feature is used with Faton connectivity cards, users can remotely re-boot locked-up network equipment. Simply connect to the interface card over the network, and toggle the password-protected load segment controller to get your network back online.

### Protect virtual machines for a total virtualization solution

In the event of an extended power outage, NetWatch software also works in conjunction with the ConnectUPS cards to allow you to gracefully and sequentially shut down connected devices, including virtual machines. NetWatch is compatible with ESXi and vSphere from VMware.



Eaton NetWatch Client 5.0 has tested compatible with Cisco Unified Communications Manager 4.3

# Easily service the UPS without interrupting power to protected systems

LEDs on the front panel of the 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.



Load segment 1 with critical equipment

Load segment 2 with less critical equipment

5125 tower model 1000 to 2200 VA

#### **MODEL SELECTION GUIDE - 5125**

MODEL NUMBER <sup>1</sup>	POWER RATING (VA/WATTS)	INPUT/OUTPUT VOLTAGE (VAC) <sup>2</sup>	INPUT CONNECTION	OUTPUT Receptacles <sup>4</sup>	DIMENSIONS HxWxD (IN/MM)	WEIGHT (LB/KG)	PART NUMBER UPC CODE
Tower Models (North Ameri	ca)						
PW 5125 1000	1000/700	120	5-15P, 6 ft line cord	(6) 5-15R	9.81 x 6.38 x 15.79/ 249 x 162 x 401	34.3/15.6	05146629-5501/ 790341032937
PW 5125 1500	1440/1050	120	5-15P, 6 ft line cord	(6) 5-15R	9.81 x 6.38 x 18.39/ 249 x 162 x 467	50.7/23.0	05146632-5501/ 790341032968
PW 5125 2200	1920/1600	120	5-20P, 6 ft line cord	(6) 5-15R, (2) 5-20R	9.84 x 8.07 x 19.41/ 250 x 205 x 493	68.3/31.0	05146635-5501/ 790341032999
PW 5125 2200b	2080/1600	208	IEC-320-15A, Inlet <sup>3</sup>	(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 (Internationa	I)						
PW 5125 1000i	1000/700	230	IEC-320-10A, Inlet <sup>3</sup>	(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 <sup>3</sup>	(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 <sup>3</sup>	(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
Rackmount Models Only <sup>5</sup>							
PW 5125 5000 RM	5000/4500	200/208, 220, 230, 240	L6-30P	L6-30R on short cord, (2) L6-20 (4) C13	5.25 x 17.50 x 26.0/ 133 x 445 x 661	161/73	103003611-5591/ 790341045616
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/ 133 x 445 x 661	161/73	103003610-5591/ 790341045647
PW 5125 6000i RM	6000/5400	220, 230, 240	IEC309-32A	IEC309-32A on short cord, (4)C19, (4)C13	5.25 x 17.50 x 26.0/ 133 x 445 x 661	161/73	103003612-5591/ 790341045630
Optional Extended Battery N	Modules (EBMs)						
For use with PW 5125 24V EBM 1000 VA tower models only	N/A	N/A	N/A	N/A	9.84 x 6.38 x 18.66/ 250 x 162 x 474	59.5/27.0	05146638-5501/ 790341033088
For use with PW 5125 48V EBM 1500/2200 VA tower models only	N/A	N/A	N/A	N/A	9.84 x 6.38 x 18.66/ 250 x 162 x 474	59.5/27.0	05146639-5501/ 790341033095
For use with PW 5125 240 EBM (beach grey) 5000/6000 VA RM models only	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 240 EBM (black) 5000/6000 VA RM models only	N/A	N/A	N/A	N/A	5.25 x 17.50 x 24.75/ 133 x 445 x 629	169/76	103003387-6501/ 790341041014

<sup>1. 50/60</sup> automatic frequency selection. 2. 120V models are 110V, 120V, 127V user-selectable. 230V models are 220V, 230V, 240V user-selectable. 208V models are 208V, 220V, 230V, 240V user-selectable. 3. Includes (2) each IEC interconnect cables. 4. 1000-1500 VA models are divided into (2) load segments (receptacle groups). 2200 VA models are divided into (3) load segments (receptacle groups). 5000/6000 VA models are divided into (2) load segments.

Note: 5000/6000 VA models ship with both black and beige front panel bezels; models include rail kits and mounting hardware.

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 5000 VA to 6000 VA models)



5000/6000 VA rackmount model



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 5000–6000 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 provide 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 Interface Card



**Multi-server Card** 



Relay Interface Card



Environmental Monitoring Probe (EMP)

### Power management software unifies and centralizes UPS management

Every 5125 comes with a CD that includes multi-media demonstrations, product data sheets and the following power management software:

- Free NetWatch software for network shutdown
- Free (up to 10 nodes) Intelligent Power® Manager supervisory software



Ideal for monitoring and managing multiple power and environmental devices, Intelligent Power Manager

software delivers a global view across the network from any PC with an Internet browser. Exceptionally versatile, it is compatible with devices supporting a network interface, including other manufacturers' UPSs, environmental sensors, ePDUs and more.

Using Eaton's innovative 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 5125 UPS family delivers confidence— confidence that your organization's critical electronics are protected by reliable and effective line-interactive protection, and confidence that Eaton will be there with you for the long term with warranty coverage and expert technical support.

Eaton offers a comprehensive, three-year limited warranty (with product registration) covering parts and labor. For warranty service on your 5125, we will ship a replacement unit via overnight express.

For added confidence, your 5125 UPS is also covered by a \$150,000 load protection guarantee.

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

#### **AVAILABLE OPTIONS**

Order Number	Description
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)
05146401-5501	Power Distribution Unit 250 VA 0U form factor. Side cabinet mount (5000/6000 VA)

Technical Specifications<sup>1</sup>

Electrial Input	1000–2200 VA 5000/6000 VA		
Nominal Voltage <sup>2</sup>	120, 208 and 230 Vac <sup>2</sup>	200/208, 220, 230 and 240 Vac <sup>2</sup>	
Input Voltage Ranges (for user-selectable voltages)	low voltage: 77-152 V high voltage: 154-288 V	160-288	
Operating Frequency	50/60 Hz, auto-sensing		

46-54 Hz for 50 Hz; 56-64 Hz for 60 Hz

Frequency Range **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 runtime table		
Battery Replacement	hot-swappable internal batteries and external batteries modules		
Recharge Time	<3 hours to 90% usable capacity		
Start-On-Battery	allows start of UPS without utility input		

General

Electrical Power Module Replacement	no	yes, hot-swap	
Diagnostics	full system self-test on power up		
UPS Bypass	no bypass	internal bypass	
Transfer Time	4 ms typical, 6 ms max		
Dimensions and Weights	see Model Selection Guide		
Overload (normal operation)	110% overload, shutdown after 3 minutes 150% overload, shut down 10 cycles	103-112% 2 minutes and > 112% 12 line cycles	

**Communications** 

User Interface	front control panel			
Audible Alarms	for various UPS alarm conditions, including	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 network protection) & RJ11 (low voltage models modem protection)	No		
REPO Port	meets NEC code 645-11 intent and UL requirements for 5000/6000 VA models			
Communication Ports	see Communications Slot	native USB and serial port		
Communication Slot	RS-232 single serial module (standard)  Options available, see options chart  Web/SNMPxHub card factor installed; other options also avail			
Cable	6-foot communicat	6-foot communications cable included		
Power Management Software	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; Class B for 1000 and 1500 VA	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 dBA typical less than 45 dBA typical		
Altitude	3000m (10,000 ft) without derating		

<sup>1.</sup> Specifications are subject to change without notice due to continuing product improvement programs. 2. See Model Selection Guide for user-selectable voltages.

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