

# Powerware® 5115 1U Rack Mount UPS

## Features

- ▶ 1U rack height conserves valuable rack space
- ▶ Unique chassis design adapts to rack mount, wall mount, side cabinet (zero U), and bench top applications
- ▶ Advanced Battery Management (ABM®) technology doubles battery service life
- ▶ True sine wave output delivers smooth, continuous power
- ▶ Buck and Boost Automatic Voltage Regulation corrects incoming voltage fluctuations
- ▶ Load segments enable scheduled shutdowns and extend backup time for critical devices
- ▶ Hot-swappable batteries minimize downtime, simplify service and extend service life of UPS
- ▶ Standard USB and RS232 serial ports extend communication capacity
- ▶ X-Slot card communication options extend power management capability
- ▶ Power management software (included) ensures data integrity
- ▶ Warranty:
  - 2-Year Limited Warranty
  - 10-Year Pro-Rated Warranty
  - \$25,000 Load Protection Guarantee



## Product Snapshot

Power Rating:	500-1500 VA
Input/Output Voltage:	120 & 230 Volts AC
Frequency:	50/60 Hz (auto-sensing)
Configurations:	Multi-mount 19 inch rack, 23 inch rack, zero U, & wall mount

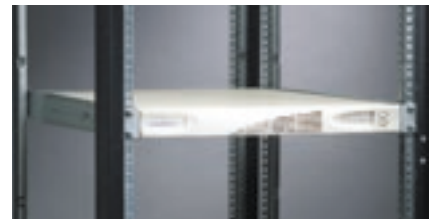
The Powerware 5115 Rack Mount UPS is the ideal high-density power protection solution ideal for servers, storage systems, network equipment and other critical devices. The slim design and wide range of installation possibilities make the Powerware 5115 Rack Mount the most versatile UPS available. Occupying only 1U of rack height, the 5115 conserves valuable rack space for other critical devices while delivering powerful performance.

Unlike other UPSs that use simulated sine wave, the Powerware 5115 Rack Mount UPS provides pure sine wave output during battery operation. As a result, the connected devices continue to receive high quality electrical input and operate smoothly even during power outages. In addition, this unique UPS corrects incoming voltage fluctuations to further protect the connected equipment.

The Powerware 5115 Rack Mount UPS incorporates ABM® technology, which doubles battery service life, optimizes recharge time for quick recovery after power outages, and provides advanced warning at the end of useful battery life. When alarm notification indicates that the end of battery life is near, the batteries can be easily hot-swapped without powering down the connected load. User-friendly design allows batteries to be exchanged through the front of the unit.

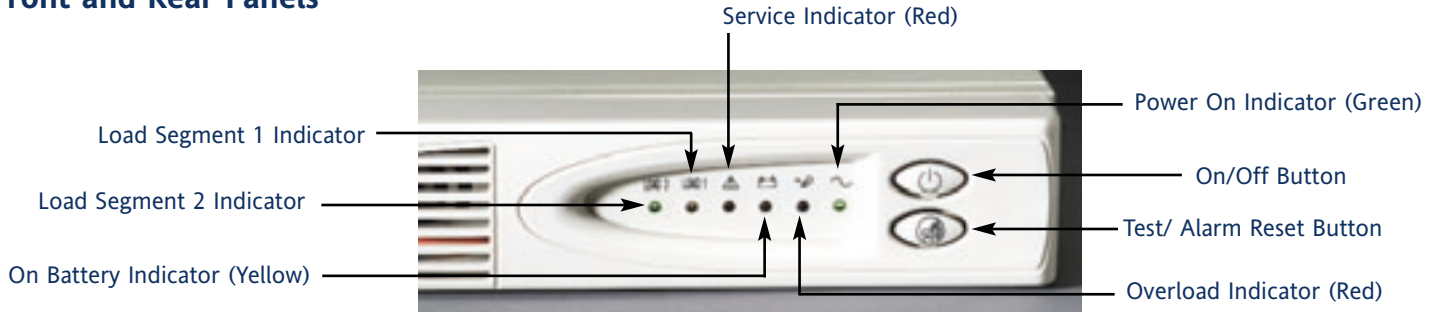
Simple plug-and-play operation makes installing the Powerware 5115 RM UPS fast and easy. The sophisticated communications are flexible, allowing for local, network or remote monitoring and management. This UPS arrives with the latest version of the Powerware Software Suite with complete cabling, which provides power monitoring and unattended shutdown software. The Powerware 5115 Rack Mount UPS additionally comes standard with a USB port, RS232 serial port and X-Slot communication bay to provide further connectivity. In addition, the Network Transient Protector isolates equipment from "back door" power surges traveling through network and phone lines.

With the Powerware 5115 Rack Mount UPS, Invensys Powerware delivers a best-in-class solution for critical network loads and the growing need for reliable, ultra-compact power protection. All models are manufactured to ISO 9001 standards and meet or exceed worldwide specifications for safety, performance and excellence. Safeguarding against power problems has never been easier.



# Powerware 5115 Rack Mount Special Features

## Front and Rear Panels



**USB Communications Port** communicates with a USB-compliant computer when used with included LanSafe power management software

**Site Wire Fault Indicator** offers instant notification of site wiring problems

**Network Transient Protector** isolates your modem, fax machine, telephone and other communications equipment

**4 UPS Protected Outlets** offer long-lasting battery power during power failures and complete Series 5 power protection

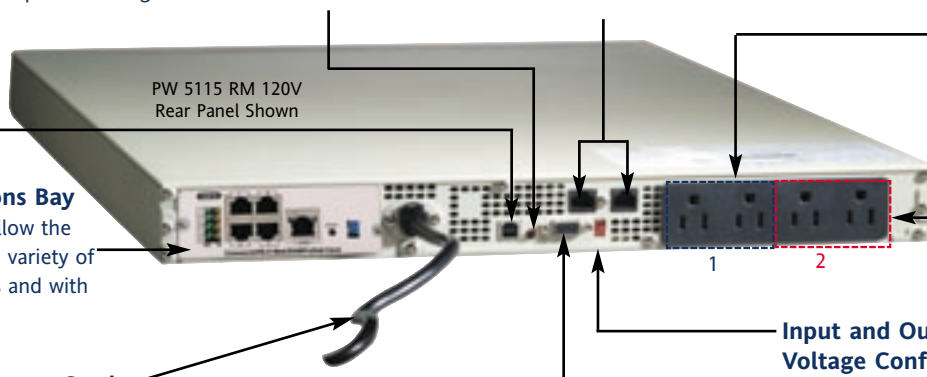
**X-Slot Communications Bay**  
(Optional) X-Slot Cards allow the UPS to communicate in a variety of networking environments and with different types of devices

**6-ft. Power Cord with 5-15 Plug**

**RS232 Communications Port** provides unattended shutdown and remote UPS monitoring capability when used with included power management software and communication cable

**Input and Output Voltage Configuration DIP Switches** configure the output voltage and input voltage range

**Load Segments 1 & 2** are sets of receptacles that can be controlled by power management software, providing an orderly shutdown and startup of your equipment



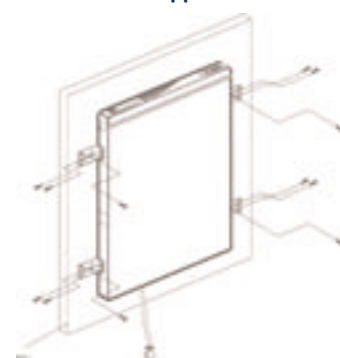
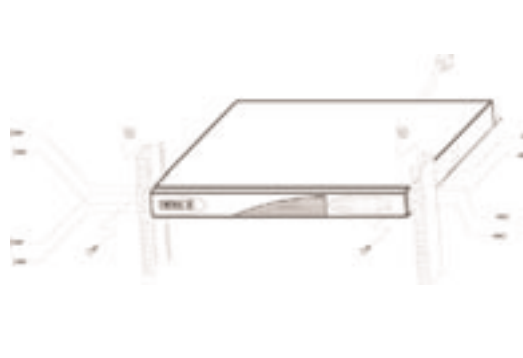
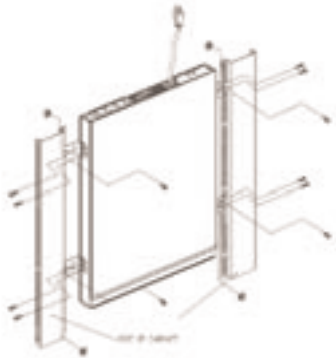
## Mounting Configurations

The Powerware 5115 RM UPS packs the same technology of the tower model into a compact design for various applications. By limiting the rack height (1U) of the UPS, the Powerware 5115 RM saves room for other critical equipment such as servers and disk arrays. Adaptable to rack mount, wall mount, side-mount and bench-top applications, the Powerware 5115 RM is the most versatile UPS available. And all mounting accessories are included with every UPS.

**Side mount (zero-U) applications**

**19 inch and 23 inch Rack-mount applications**

**Wall-mount applications**



## Battery Features and Run Times

### Hot-Swappable Batteries

The batteries are easily accessible via the tool-free front access panel. The Powerware 5115 RM UPS allows users to hot-swap batteries without powering down the connected load or removing the unit from the rack. This makes it possible to extend the life of the UPS without returning the unit for service and ensures connected equipment always stays up and running.



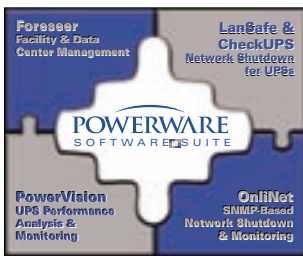
Powerware 5115 RM shown with front cover removed and battery sliding out.

### Battery Run Times (in minutes)

Load (VA/Watts)	PW5115 500 RM(i)	PW5115 750 RM(i)	PW5115 1000 RM(i)	PW5115 1500 RM(i)
200/130	19	37	41	76
300/190	11	25	29	58
500/320	5	13	15	28
600/400		9	12	21
750/520		6	8	16
900/600			6	11
1000/670			5	9
1200/800				8
1440/1000				5

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

## Software and Connectivity Options



Powerware Software Suite

The industry's most comprehensive software bundle, the Powerware Software Suite, is included with every Powerware 5115 RM UPS.

- ▶ Provides advanced power management
- ▶ Ensures data integrity
- ▶ Enables graceful, unattended shutdown
- ▶ Remote monitoring and manageability through SNMP or Web-based networks
- ▶ Free updates on [www.powerware.com](http://www.powerware.com)



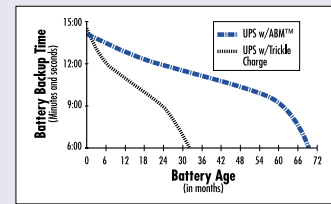
ConnectUPS-X Web/SNMP/xHub Card

- ▶ Optional X-Slot Communication Cards
  - ConnectUPS Web/SNMP Card adds control and monitoring through SNMP/Web-based networks
  - Relay Card adds integration to building management systems
  - USB Card allows UPS to communicate with USB compliant computers

**Order Number**  
103002974-5501  
05146508-5501  
1018460

**Description**  
ConnectUPS-X Web/SNMP/xHub Card  
X-Slot USB Card  
X-Slot Relay Card

### ABM® Technology



Data based upon tests performed by an independent battery manufacturer.

### Advanced Battery Management

#### (ABM®) technology doubles battery service life.

The lead-acid batteries typically used in a UPS are considered viable as long as they can maintain backup times of at least half that of new batteries. The illustration above shows that batteries that are constantly trickle charged (as are virtually all other UPSs on the market today) reach the end of their useful life in less than half the time of batteries charged using ABM. This unique process uses a proprietary three-stage charging technique that not only doubles battery service life, but also optimizes recharge time and provides up to a 60-day advanced notification of the end of useful battery life.

# Powerware 5115 Rack Mount 1U Model Selection Guide

Model Number <sup>1</sup>	Power Rating (VA / Watt)	Input Connection	Output Receptacles <sup>3</sup>	Dimensions H x W x D (in / mm) <sup>4</sup>	Unit Weight (lb/kg)
<b>120 Vac Models<sup>2</sup></b>					
PW5115 RM 500	500 / 320	5-15P	(4) 5-15R	1.73 x 17.3 x 22.8/4.45 x 44.0 x 57.8	35.2/15.9
PW5115 RM 750	750 / 520	5-15P	(4) 5-15R	1.73 x 17.3 x 22.8/4.45 x 44.0 x 57.8	41.4/18.8
PW5115 RM 1000	1000 / 670	5-15P	(4) 5-15R	1.73 x 17.3 x 22.8/4.45 x 44.0 x 57.8	41.4/18.8
PW5115 RM 1500	1440 / 1000	5-15P	(4) 5-15R	1.73 x 17.3 x 22.8/4.45 x 44.0 x 57.8	48.6/22.0
<b>230 Vac Models<sup>2</sup></b>					
PW5115 RM 500i	500 / 320	IEC-320-10A	(4) IEC-320-10A (C13)	1.73 x 17.3 x 22.8/4.45 x 44.0 x 57.8	35.2/15.9
PW5115 RM 750i	750 / 520	IEC-320-10A	(4) IEC-320-10A (C13)	1.73 x 17.3 x 22.8/4.45 x 44.0 x 57.8	41.4/18.8
PW5115 RM 1000i	1000 / 670	IEC-320-10A	(4) IEC-320-10A (C13)	1.73 x 17.3 x 22.8/4.45 x 44.0 x 57.8	41.4/18.8
PW5115 RM 1500i	1500 / 1000	IEC-320-10A	(4) IEC-320-10A (C13)	1.73 x 17.3 x 22.8/4.45 x 44.0 x 57.8	48.6/22.0

1. 50/60 automatic frequency selection. 2. 120 V models are 110 V, 120 V, user-selectable. 230 V models are 220 V, 230 V, 240 V user-selectable. 3. divided into (2) Load Segments (receptacle groups). 4. Unit fits into standard 19 & 23 inch racks or can be wall-mounted and zero U rack-mounted. Mounting hardware supplied.

## Technical Specifications<sup>1</sup>

Electrical Input	
Nominal Voltage	120V models are 110V or 120V user-selectable; 230V models are 220V, 230V or 240V user-selectable
Input voltage ranges for user-selectable voltages	+/- 20% for nominal voltage at full load
Operating Frequency	50/60Hz, Auto-sensing
Frequency Range	46-65Hz
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	Electronic current limit
Battery	
Battery Type	Sealed, lead-acid; maintenance free
Battery Run time	See Battery Run Time chart
Battery Replacement	Hot-swappable internal batteries
Recharge Time	<3 hours to 90% usable capacity
Start-On-Battery	Allows start of UPS without utility input
Communications	
User Interface	LED status display with AC power on, load Group, Overload, On Battery and General Alarm indicators, Site Wiring Fault Indicator on rear panel for low volt models.
Audible Alarms	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)
X-Slot Optional Communication Cards	ConnectUPS-X Web/SNMP/xHub Card; USB card ; X-Slot Relay card
Standard Communications	1 x RS-232 Serial Port & 1 x USB Port
Cable	6-foot communications cable included
Power Management Software	Powerware Software Suite CD-ROM (bundled with UPS)

General	
Diagnostics	Self-test @ power up
Transfer Time	2-4 ms typical
Dimensions and weights	See Model Selection Guide
Overload (normal operation)	110% overload, shutdown after 3 minutes. 150% overload, shut down 10 cycles
Environmental	
Safety Markings	120V Models UL; cUL; 230V Models C-Tick; CE, TUV, cUL, UL
Safety Conformance	120V Models: UL 1778; UL497A; cUL (CAN/CSA C22.2, No. 107.1) 230V Models: UL1778, UL 497A (data line only); cUL (CAN/CSA C22.2, No. 107.1); EN 50091-1-1 and IEC 60950
EMC Compliance	120V Models: FCC Part 15 subpart J Class A, ICES-003; 230V Models: EN 50091-2, FCC Part 15 subpart J Class A , ICES-003
Operating Temperature	0 to 40° C (32 to 104° F)
Storage Temperature	-15 to 50° C (5 to 122° F)
Relative Humidity	5% to 95% non-condensing
Surge Suppression	ANSI C62.41 Category A (formerly IEEE 587)
Audible Noise	Less than 40 dBA typical
Altitude	Up to 3000M (10,000 ft) without derating

1. Specifications are subject to change without notice due to continuing product improvement programs.

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