

## Your Partner in Power Protection



HERETE COMM

**Product Catalog** 

## About Minuteman

Who we are

For almost 35 years, Minuteman Power Technologies has partnered with businesses of all sizes to provide high quality, reliable power protection solutions. Minuteman strives to provide solutions for crucial systems that require constant power protection, as well as a full range of support products to facilitate the management of those systems.

Headquartered in Carrollton, Texas, Minuteman Power spans throughout two continents, engaging a variety of countries. Minuteman specializes in seven specified markets: Government, Education, Point-of-Sale/Hospitality, Small to Medium-sized Businesses, Value-added Resellers, Telecom, and Security. Since its creation in 1982, the Minuteman brand has been synonymous with quality solutions; our products are designed to provide exceptional value, in terms of performance, reliability, and price. **See for yourself why Minuteman is your partner in power protection.** 



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Find your solution

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MinutemanUPS.com Visit our website to learn even more about Minuteman!

- Full Product Specifications
- · Software Downloads
- · On-line Training and Videos
- Authorized Dealers and Resellers
   Tech Support and Power FAOs
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## **Benefits of Power Protection**

Why should you protect your equipment?

Power anomalies can sometimes be unavoidable; they account for 37% of business disruptions. Some sort of power problem has affected us all, whether it has been a power outage that caused an interruption of productivity, or equipment and data files that have sustained damage.

No matter the size of your organization, the costs associated with the repair or replacement of equipment, or recovery of corrupted data files, can be substantial. In many cases power protection devices pay for themselves the first time a power problem occurs.

### Single-Phase Uninterruptible Power Supplies

The full line of Minuteman uninterruptible power supply solutions provides maximum protection to shield your equipment from catastrophic damage while also providing battery backup during power outages.

- Complete protection from all power problems
- Provides backup power during outages and brownouts
- Three types: Standby, Line-Interactive, On-line

#### **Power Management and Distribution**

Power is nothing without control. Minuteman's power management and distribution products put a range of capabilities in technician and administrator hands to ensure efficient operations. Remote Power Managers (RPMs) offer the ability to control power to devices from anywhere that an internet connection is available, while Power Distribution Units (PDUs) allow safe and organized means of delivering power to each device that requires it.

- RPMs allow users to control power from anywhere; eliminates the need to perform service calls to reboot locked devices and reduces costs and downtime
- Organize and safely distribute power in racks and closets with PDUs

#### Surge Suppressors

If you are seeking basic power protection to prevent spikes and surges from causing catastrophic damage to circuit boards, power supplies, and other internal components, Minuteman has a diverse line of surge suppressors to meet your needs.

- Cost-effective protection for peripherals, printers, and other equipment which will not be required during a power event
- · Safely and efficiently deliver power to multiple devices

## **The Problems With Power**

What can go wrong with utility power?



Brownout / Voltage Sag Decrease in voltage can cause data loss due to unintended restarts, hardware damage, and shortened equipment life soan



Spike / Transient Sharp increase in voltage as high as 600V can cause catastrophic damage to hardware

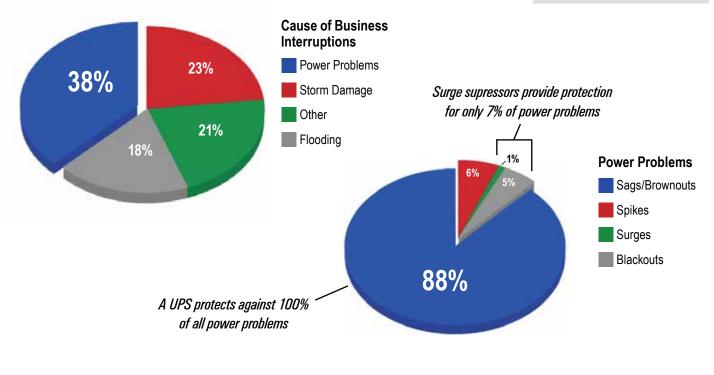


Blackout Total loss of power can cause data loss and file corruption, total loss of systems for sustained periods



#### Power Surge

Sudden increase in voltage can damage electronics, corrupt vital data, and shorten equipment life span



**Benefits of Power Protection / Leading Causes of Business Interruptions** 

## **Applications and Industries**

## Products designed to protect critical equipment throughout your business

Minuteman's line of battery backup UPS products offer complete protection from all power problems, with products ranging from 350VA to 20kVA. Minuteman's line of MMS Surge protectors provide unique features, reliable protection, and exceptional warranty protection. Minuteman's line of remote power management (IP-addressable PDU) products provide admins with the ability to securely manage power from a PC, smartphone, or tablet from anywhere with an internet connection.

Communications	Communication is the key to maintaining relationships with your customers. Without adequate power protection, an outage or any other destructive power event can not only cause damage to sensitive telecom equipment, but also open a window of opportunity for your competitors. Minuteman offers solutions for small, medium and large-scale VoIP and unified communications systems.	<ul> <li>Telephone Systems         <ul> <li>Large or small, all telephone systems require power to stay connected</li> </ul> </li> <li>VoIP Hardware         <ul> <li>Network Devices             <ul></ul></li></ul></li></ul>
Security	A properly implemented power protection system eliminates the possibility of a security system outage or damage due to power problems. Minuteman's product line has become a favorite of both users and installers of security systems, thanks to an unbeatable combination of tailored solutions, helpful features, and incredible value. Keeping everyone secure, even when power is out, should be a high priority. Without power, there is no security.	<ul> <li>Access Control / Intrusion Facility security begins at access points</li> <li>DVR / NVR / Camera Recording devices must remain on during emergencies to protect life and property</li> <li>Fire and Emergency Communications Lengthy backup is required for these vital systems</li> </ul>
IT / Network	Today's networks extend beyond the confines of one building, which presents several problems for network managers because the greater the reach of any network, the greater the vulnerability to power problems. Servers, data storage, switches, modems, routers, hubs – they all need to be protected against outages and damaging power glitches. Minuteman offers a wide range of solutions to protect small devices and large-scale systems.	<ul> <li>Server / Network Storage Devices Critical data is in danger without proper protection</li> <li>Network Hardware 100% uptime is expected, connectivity is critical</li> <li>Workstations Data loss at the employee level can be tremendous if not properly protected</li> </ul>
Education	Educational institutions are not exempt from power-related problems. Classrooms, labs, sports facilities, and administrative offices all are vulnerable and are guaranteed to be subjected to power problems throughout the year. Critical functions like emergency communications, surveillance systems, and access control must have ample battery back-up time. Minuteman offers special educational institution pricing. With campus safety being such an important thing, power protection must be a part of any emergency plan.	<ul> <li>Primary / Secondary From campus safety to IT, schools depend on power</li> <li>Higher Education Power is critical on campus - Minuteman understands</li> </ul>
Government	Federal agencies, military bases, as well as state and local government offices are not immune from power problems. Protecting assets and personnel is vital. Minuteman provides value-based solutions to protect communications systems, information technology systems, and security systems. Minuteman also offers special government pricing programs for large opportunities.	<ul> <li>State and Local Services must remain available in emergencies</li> <li>Federal Extensive experience in large federal agencies</li> </ul>
POS / Hospitality	Ensuring that customers have a positive experience is always a high priority. Protecting valuable equipment such as POS terminals, servers, security systems, and anti-theft systems is essential. Minuteman has POS and hospitality power products that range from small store or hotel solutions, to	<ul> <li>POS Cash Registers / Terminals Sales require power to be processed</li> <li>Hotels and Casinos Communications and guest security are paramount</li> </ul>

large-scale, multi-store solutions.

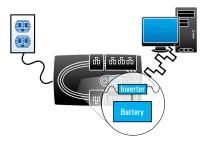
## **UPS** Types

Which system is right for your equipment? Learn the differences and get the right hardware for your needs.



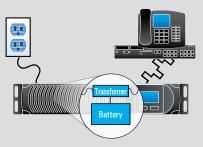
Standby (Good)

- Cost-Effective Small-load Protection Protects equipment by reverting to battery during power problems; most basic UPS architecture
- Workstation and Peripheral Protection Ideal for individual devices, including PCs, network peripherals, security devices, and more
- Compact Form Factor Small size perfect for cramped installations
- Power Applications Most commonly powers personal computers, VoIP, and CCTV without any objectionable dip or brownout to the device



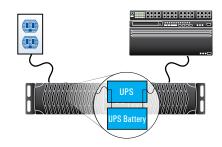


- Automatic Voltage Regulation (AVR) Provides boost and / or buck voltage regulation without using the batteries, allowing full battery capacity to be available for outages
- Longer Battery Life and Runtimes AVR hardware manages battery life more effectively than standby units
- Available True Sine Wave Output Economical protection for sensitive equipment on select models
- Power Applications Most commonly used for small businesses, web, and departmental servers





- **Ultimate Critical System Protection** Internal inverter converts power from AC-DC-AC, providing the highest level of power conditioning
- Zero Transfer Time to Battery No delay when power goes out; suitable for industrial and laboratory equipment
- 120V and 208V Applications Multiple lines available for large load systems
- **Power Applications** Available models for loads with a power range of 1kVA - 20kVA.



## **UPS Sizing and Selection** What factors determine the proper UPS?

#### ? Considerations to help determine your UPS needs

- 1 What type of equipment is being backed up?
- 3 Where is the unit being installed?
- 2 What are the power requirements?

- 4 How much backup time is required?
- 5 What are the input and output wiring configurations?
- 6 Monitoring & Management of UPS

Size MyUPS.com

## SizeMyUPS.com · UPS sizing made easy

Minuteman's SizeMyUPS.com was the industry's first user-friendly UPS selection guide. An extensive database of equipment, easy-to-navigate controls, and convenient specifications sheets mal experts and newcomers to the power field.

- 1 Equipment Databases Build your system using our extensive database of equipment load ratings
- 2 Configuration Options Narrow your choices to your exact needs with the straightforward configuration interface
- **3 Comprehensive Solutions** Browse a complete list of solutions that meet your needs with estimated runtime and MSRP
- 4 Email, Fax, and Print Spec Sheets Send your solutions to interested parties with a single click

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## **Power Terminology**

Understanding these key terms is a critical step in determining the proper power protection devices for any type of system.

### **Alternating Current (AC)**

The form in which power is delivered from utility sources; electrical charge periodically reverses direction, and is delivered in a true sine wave form

### Amperes (Amps)

Measure of the amount of electric charge or current

#### **Direct Current (DC)**

The form of power typically provided by batteries and transformer blocks for small equipment; electrical charge is unidirectional

### Frequency (Hz)

Measure of the power cycles in AC voltage in Hertz (typically 50 or 60)

Joule

A unit of work or energy equal to the work done by a force of one newton acting through a distance of one meter.

#### Measured Load

Electrical load as determined by physically placing a true RMS power meter on the input cord of a device to determine its actual power draw

### Rated Load

Electrical load as stated in the specifications documentation of a device (typically a maximum value that the device will use during operation)

Volt / Voltage (V)

Measure of electrical potential between two points

#### Volt Amps (VA)

Measurement of apparent power and the measurement used to determine UPS capacity

#### Watt (W)

Unit of power representing actual power consumption over a given amount of time

## **Product Features**

On each product page in this catalog, you will find feature listings. Refer to this page for in-depth explations of all features.



### 208 / 220 / 230 / 240V Models

Units are available in both standard 120V and industry standard high voltage configurations for larger loads (look for model designations)

#### **Automatic Notification**

Software included or downloaded can provide notification of power events via a range of options including Email, SMS text message, or SNMP trap



### Automatic Voltage Regulation (Line-Interactive UPS)

A buck/boost transformer is utilized to regulate voltage, saving battery capacity for use during full power outages and providing longer runtime and battery life



### Double-Conversion (On-line UPS)

Incoming utility power is converted from AC to DC then back to AC, eliminating all possible power problems; ideal for critical applications

#### Emergency Power Off Port (EPO)

Dedicated port that allows users to instantly shut down the UPS in the event of an emergency such as fire, flood, or other dangerous situation

#### **Environmental Monitoring**

Environmental probe is available; allows monitoring of temperature, humidity, and provides configurable alarms via network communications interface



Unit features a connection for XL and EXL external battery packs which provide greatly increased backup runtimes

### Independent Battery Bypass

Unit will pass power through to attached equipment regardless of battery status; equipment will remain on while suitable utility power is present if batteries fail

### Independent Battery Chargers

XL battery packs feature a dedicated on-board charger, considerably reducing recharge time after an outage versus units without this feature

### LCD Status Display

Front-mounted LCD screen displays unit and power status, estimated runtime remaining, and other critical power metrics



(82)

### LED Status Display

Front-mounted panel features LED lights to communicate unit, power, and battery status

### Load-Shedding Capability

Addressable receptacle banks allow prioritizing of the attached load, extending uptime for the most critical devices

#### Mobile Accessible

Smart interface accessible from any standard web browser, including mobile devices



### Parallel Installation Capable

Multiple units can be installed and linked in parallel for either added system capacity or (N+1) redundancy



#### RoHS / RoHS 2 Compliant

Product manufactured in accordance with the European Union directive for the Reduction of Hazardous Substances in order to protect the environment



#### SentryHD / SentryPlus™ Software

Monitoring and management software available for most Minuteman UPS systems (excludes CPE products)



#### Simulated Sine Wave Output

On-battery output waveform is a stepped' approximation of the sine wave generated by utility power



#### **Option Slot**

Unit features a slot for optional Simple Network Management Protocol communications cards that allow monitoring and management via the network. The option slot can also be used with Minuteman's Programable Relay Card

#### Standby UPS

Most basic and inexpensive type of UPS hardware; utilizes battery power to resolve power issues

#### True Sine Wave Output

Output waveform closely mimics pure utility power; ideal for sensitive information technology, industrial, and laboratory equipment



#### Wall-Mountable

Unit features standard or optional hardware for mounting upright against a wall or other flat surface



#### Warranty Terms

Standard UPS warranties cover electronics for 3 or 5 years, batteries for 2, 3 or 5 years; Limited Lifetime on Surge Protectors, PDUs, and other accessories (Warranty terms depend on model)



### X3 MOV Technology

Advanced surge protection hardware dissipates heat more effectively, preventing potential fire during severe power surges and spikes

#### Generator-friendly UPS

Provides stable sine wave output (free of harmonics and distortion) without switching to battery mode when running on generator input power

## Minuteman Power Technologies

Power Terminology and Product Features

## Minuteman Standard & Extended Warranty Plans

#### Uninterruptible Power Supplies (UPS) Minuteman provides three years of coverage on most

Will luternan provides three years of coverage on most UPS products (see individual product pages for details).

Minuteman's 2- and 3-year UPS warranties include non-prorated battery coverage; if a battery failure occurs during the warranty period, the customer will not be charged a prorated cost for replacements. Surge Protection / Power Management Limited lifetime warranties are provided on most MMS Series surge protectors and OEPD power distribution units.

All RPM Series products include a 3-year parts and labor warranty.

### **Extended Warranty Options**

Two levels of 5-year warranties are also available for most UPS products, including the Premier Zero-ownership cost option which includes automatic battery replacement.



## Standard Extended or Premier? Two Plans to Fit Your Needs

#### **Standard Extended Warranty Plan Highlights**

• Provides a full 5-year product warranty coverage

batteries

 Includes replacement of defective batteries for the entire warranty term at no additional charge (not pro-rated)

## Premier Zero-Ownership Cost Extended Warranty Plan Highlights

- Includes all the benefits listed in the Standard Extended Warranty, plus...
- Minuteman will cover all freight charges to repair/replace defective products and include packaging and return shipping of old batteries so that they can be properly recycled
- Provides total warranty coverage on UPS for most business lease terms and/or depreciation terms
- Even if batteries are operating nominally throughout the warranty period, Minuteman will contact the customer after four-years to offer guaranteed battery replacement
- If returned, Minuteman will properly recycle the old Ensures that there are absolutely no additional costs to the end-user for maintaining the UPS for five years
  - All warranty claims will be given priority status upon arrival

	Standard Warranty	Standard Extended Warranty	Premier Warranty
Warranty Term	3 Years	5 Years	5 Years
Battery Warranty (Not pro-rated)	Yes	Yes	Yes
Free Battery Recycling	Upon request	Upon request	Automatic
Warranty Policy	Repair or replace	Repair or replace	Repair or replace
Free Ground Freight	Return Only	Return Only	All Included
Special Product Offers	-	Yes	Yes
Unique Warranty ID Labels	-	Yes	Yes
Batteries Warranted for 5 Years	-	Yes	Yes
Battery Replacement Notification	-	-	Yes
Priority Repair Response	-	-	Yes



Learn more about both plans at: minutemanups.com/extendedwarranty

## Minuteman Extended Warranty Eligibility Chart

Standard Plan & Premier Plan (P)	Models
MMEW5YR-01(P)	EP550LCD, EP700LCD, ETR550LCD, ETR700LCD
MMEW5YR-02(P)	EP1000LCD, EP1500LCD, PR0750RT2U, PR0750RT2UNC, PR01000RT2U, PR01000RT2UNC, ETR1000LCD, ETR1500LCD
MMEW5YR-03(P)	EC1000LCD, EC1500LCD, EC1000RT2U, EC1500RT2U, CPE1000, PRO1500RT2U, PRO1500RTNC, PRO2000RT2U, PRO2000RT2UNC, ED1000RMT2U, ED1500RMT2U ( <i>standard only</i> ), E750RT2U, E750RTXL2U, E750RTXL2UNC, E1000RT2U, E1500RTXL2U, E1500RTXL2UNC, E1500RTXL2U, E1500RTXL2U, E1500RTXL2U, E1500RTXL2UNC, E150RTXL2UNC, E
MMEW5YR-04(P)	EC2000LCD, EC3000LCD, EC2000RT2U, EC3000RT2U, CPE2000, CPE3000, CPEBP1000, ED2000RMT2U, ED3000RMT2U, BP24RTXL, BP48RTXL, BP36RTXL, BP72RTXL, E2000RT2U, E2000RTXL2U, E2000RTXL2UNC, E3000RTXL2U, E3000RTXL2UNC, E3000RTXUNC, E3000RTXL2UNC, E3000RTXL2UNC, E3000RTXL2UNC, E3000RTXL2UNC, E3000RTXL2UNC, E3000RTXL2UNC, E3000RTXL2UNC, E3000RTXL2UNC, E3000RTXL2UNC, E300RTXL2UNC, E3000RTXL2UNC, E3000RTXL2U
MMEW5YR-05(P)	CPEBP2000, CPEBP3000, BP36RTEXL, BP24RTEXL, BP48RTEXL, ED5000RTXL, ED5200RTXL, ED5000RTXLMB, ED5200RTXLMB, ED6000RTXL, ED6200RTXL, ED6000RTXLMB, ED6200RTXLMB, BP192RTXL, BP240RTXL
MMEW5YR-06(P)	ED6000T, ED6200T, ED10000T, ED10200T, ED8000RTXL, ED8200RTXL, ED8000RTXL5TF, ED8000RTXLMB, ED8200RTXLMB, ED8000RTXL5TFMB, ED10000RTXL, ED10200RTXL, ED10000RTXLMB, ED10200RTXLMB, ED10000RTXL5TF, ED10000RTXL5TFMB, EDBP10000T
MMEW5YR-07(P)	ED10000RTXLP, ED12000RTXLP
MMEW5YR-08(P)	ED16000RTXLP, ED20000RTXLP

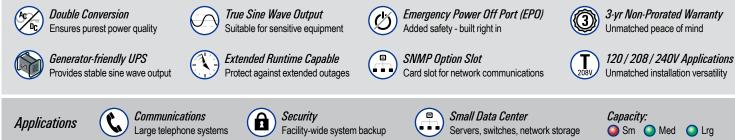
## Endeavor 5-10kVA Series

5-10kVA True On-line Double Conversion Rack / Tower

The Minuteman Endeavor 5-10kVA Series UPS combines transient-free true sine wave output, extended runtime, and redundant or parallel configuration options for critical applications. A front panel LCD display provides visual notification of the UPS status, including AC input status, battery status, and UPS fault indication.

The Endeavor 5-10kVA series is the largest and most comprehensive single-phase product line in the Minuteman family. In addition to a multitude of voltage and outlet configurations, the line can also be paralleled for additional capacity or redundancy, making it ideal for a wide range of applications.

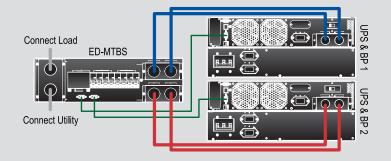




## Parallel / N+1 Redundancy Expand for added capacity or reliability

In addition to stand-alone configurations, two Endeavor 5-10kVA rackmount UPS systems can be installed in parallel, automatically providing one of two added benefits depending on attached electrical load:

- 1 Less than 50% Load: Parallel for N+1 Redundancy
- 2 More than 50% Load: Parallel for Capacity (up to 20kVA)







Endeavor 8/10kVA Control Unit (3U rack height)



Endeavor 5/6kVA External Battery Pack (BP192RTXL)



Endeavor 5/6kVA Step Down Transformer



Endeavor 8/10kVA External Battery Pack (BP240RTXL)



Endeavor 8/10kVA Step Down Transformer



Endeavor 5-10kVA Maintenance Bypass Switch

RoHS

Endeavor 5-10kVA True On-line Double Conversion Rack / Tower

## Endeavor 5-10kVA UPS

Standard features include:

- True Double-Conversion On-line Technology • Maximum protection for critical equipment
- **Digital Signal Processor Design** Higher reliability; reduced number of components in the UPS
- Higher Power Factor (0.9pf) Increases the real power capacity of each individual model
- 120VAC / 208VAC w/ Standard Receptacles Provides flexibility for support of multiple voltages used on connected loads
- 240V Input / Output Optional Units can be factory-configured for 240V electrical service\*
- Parallel 2 Units Up to 20kVA Capacity Unit automatically selects parallel for added capacity, or N+1 redundancy based on attached load
- User-Friendly LCD Display Minuteman's familiar LCD interface provides real-time status and control of the unit
- 5 and 6kVA Include 10' L6-30P Power Cord
- **Automatic Internal Bypass** The UPS will sound an alarm and go to bypass mode when an internal fault (either hardware or battery) is detected
- Independent Battery Bypass The unit will provide a constant output when utility power is present, even with dead or defective batteries
- **Smart Fan Control** Variable speed fan control maximizes the cooling of the UPS while maintaining optimum efficiency
- **Cold Start Function** Start UPS even without utility power
- **Simultaneous Communication Options** Greater management and monitoring flexibility
- Minuteman SentryHD UPS monitoring and control software included
- **RoHS 2 compliant** Meets EU standards for reduction of hazardous materials
- Industry Leading Product Protection Standard 3-year electronics and battery warranty with non-prorated battery coverage; 5-year warranty available; \$200,000 Platinum Protection Plan (US and Canada)

\*Additional charge for 240V configuration

## Endeavor 6 and 10kVA Tower UPS

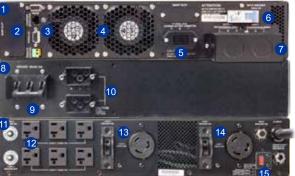
Parallel and Extended Runtime Capable Tower

The Endeavor Tower Series is yet another option for applications that require the best protection available. This feature-rich, single-phase, true double-conversion on-line UPS has been designed to support large loads for data centers, large telephone systems and other mission-critical applications.



### Specifications Complete spec table at minutemanups.com/endeavor510

Model No. (208V) (208 in - 120/208 out)	ED5200RTXL (ED5000RTXL)	ED6200RTXL (ED6000RTXL)	ED8200RTXL (ED8000RTXL)	ED10200RTXL (ED10000RTXL)	
VA/Watts	5000 / 4500 (4556 / 4100)	6000 / 5400 (5556 / 5000)	8000 / 7200 (6889 / 6200)	10000 / 9000 (8889 / 8000)	
System Voltage	192	VDC	240	/DC	
Runtime (half/full)	12/4	11 / 3	14 / 5	12 / 4	
Voltage Range	156 - 2	80VAC	180 - 2	80VAC	
Input Plug Type	Hardwire / L6-30P/p (Hardwire / L6-30P/p		Hardwi (Hardwi	,	
Receptacles	Hardwi (6 - 5-15/20R, 1 - L	,	Hardwi (8 - 5-15/20R, 1 - L		
Communications Ports		SNMP Option	Slot / RS232		
Dimensions L x W x H (in / mm)	26 x 17.3 x 7 / 6 (26 x 17.3 x 10.5 / (	60 x 440 x 177.5 660 x 440 x 265.5)	24.6 x 17.3 x 10.3 / 625 x 440 x 261.2 (24.6 x 17.3 x 15.4 / 625 x 440 x 391.7)		
Weight (lbs / kg)	115.8 / 52.5 (	(198.5 / 90.0)	181.0 / 82.1 (	339.7 / 154.1)	
Certifications	cTUVus (0	Conforms to UL1778 4th RoHS 2, CE,		107.3-05),	
Available Accessories		Model number suffix	(ED5000RTXL <u>MB</u> )		
External Maintenance Bypass Switch (MTBS)	MB	MB	MB	MB	
5kVA XFR & MTBS	-	-	5TFMB	5TFMB	
		External Ba	ttery Packs		
	BP192	2RTXL	BP240	ORTXL	
Parallel Installations	ED1000RTXLP	ED12000RTXLP	ED16000RTXLP	ED20000RTXLP	
VA/Watts	10000/9000	12000/10800	16000/14400	20000/18000	
Weight (lbs / kg)	368.0 / 166.9	369.0 / 167.3	491.0 / 222.7	492.0/223.2	



- 1 UPS Control Unit
- SNMP Option Slot 2 3 Parallel Connections
- 4
- Cooling Fans 5
- External Battery Connection 6 Input Circuit Breaker
- Input/Output Connections
- 8 External Battery Pack
- 9 Battery Pack (DC) Circuit Breaker
- 10 Control Unit/BP Connections
- 11 Optional 120V Transformer
- 12 120V NEMA 5-15/20R Receptacles
- 13 208V L6-20R Recept. & Circ. Brkr.
- 14 208V L6-30R Recept. & Circ. Brkr. 15 Input Voltage Selection (208/240V)

Endeavor 5/kVA UPS

Complete table at minutemanups.com/endeavor610

Model No.	ED6000T	ED6200T	ED10000T	ED10200T	
VA/Watts	6000/4	200	10000	/7000	
Output Voltage (VAC)	120 and 208/240	208/240	120 and 208/240	208/240	
Runtime (half/full)	21 / 8 min 15 / 5 min				
Input & Output Type	Hardwired Standard				
SNMP Manageable		Yes	(Optional)		
Dimensions L x W x H (in / mm)	25.4 x 11.4 645 x 290		25.4 x 11.4 x 34.7 / 645 x 290 x 881	25.4 x 11.4 x 29.4 / 645 x 290 x 748	
Weight (lbs / kg)	275 / 125	165/75	374 / 170	264 / 120	
Extended Runtime	EDBP10000T External Battery Pack				

## **Endeavor LCD 1-3kVA Series**

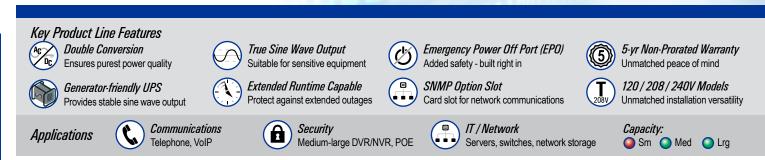
1-3kVA True On-line Double-Conversion Rack / Tower

Minuteman's Endeavor LCD Series is a premium-level,

feature-rich product that provides complete protection for all power anomalies through on-line, double conversion UPS technology, and is backed by the industry's first standard 5-year warranty.

Delivering maximum protection for mission critical loads, the Endeavor LCD Series allows the addition of external battery packs when longer runtimes are required, and all models are generator-friendly.

Offering premium protection that meets any critical application needs, users can confidently rely on Minuteman's Endeavor LCD Series for complete protection when reliability really matters.



## Endeavor LCD 1-3kVA UPS

Standard features include:

- True on-line, double-conversion technology
- Compact case design (only 2U for all models), for high-density rack installations
- Flexible installation format: Rack/Tower or Wall (with an optional install kit)
- Easy-to-read LCD display
- 0.9 output power factor
- Highly-efficient, Economy Mode option
- Output receptacle control with three load banks
- Independent Battery Bypass Allows the UPS to provide voltage regulation and spike/surge protection either with dead batteries or without batteries
- Hot-swappable battery replacement
- **Cold-start capable**
- Temperature-compensated charging
- Compatible with Minuteman's SentryHD® software
- SNMP compatible (with optional card)
- **Dedicated EPO port**
- External battery pack capability for virtually unlimited runtime
- RJ11/45 Network / Phone / Fax protection
- A standard 5-year warranty (including batteries)
- Green UPS design (RoHS2 and Energy Star compliant)
- \$200,000 Platinum Protection Plan® (US and Canada)

## **Specifications** Complete spec table at minutemanups.com/endeavorlcd

Add "NC" to model nu	umbers for pre-insta	alled SNMP-NV6 ca	ard			
Model No. 120V (208V)	ED1000RTXL2U (ED1000RMT2U)	ED1500RTXL2U (ED1500RMT2U)	ED2000RTXL2U (ED2000RMT2U)	ED3000RTXL2U (ED3000RMT2U)		
VA/Watts	1000/900 (800)	1500/1350 (1200)	2000/1800 (1600)	3000/2700 (2100)		
Battery Module No.	BM0035	BM0036	BM0037	BM0032		
Runtime (min) Half/Full load	11/3	12/3	12/4	12/3.5		
UPS Receptacles Type x Qty (208V)	8 - 5-15R (4 - 6-15R)		8 - 5-15/20R, 1 - L5-20R (4 - 6-15/20R, 1 - L6-20R)	7 - 5-15/20R, 1 - L5-30R (4 - 6-15/20R, 1-L6-30R)		
Input Plug	5-15P (	5-15P (6-15P) 5-20P (L6-20P)				
Cord Length (ft)			10			
Communications Ports	RS-232, USB, SNMP Option Slot					
Dimensions L x W x H (in / mm)	13.3 x 19 x 3.5 339 x 482.6 x 89		0 x 19 x 3.5 x 482.6 x 89	24.5 x 19 x 3.5 621 x 483 x 89		
Net Weight (lbs / kg)	29.3 / 13.3	45.9/20.8	47.6 / 21.6	70.5 / 32.0		
Approvals	cTUVus (Conforms to UL1778 5th Edition & CSA 22.2 no. 107.3-14/R: 2014)					

FCC Class A, CE Certified, RoHS2 (EU Directive 2011/65/EU)



## Minuteman Power Technologies

Endeavor LCD 1-3kVA True On-line Double-Conversion Rack / Tower

## Encompass 1-3kVA UPS

Minuteman's Encompass Series delivers the comprehensive protection only offered by a true on-line UPS. By totally regenerating the incoming AC signal through double-conversion technology, an on-line UPS provides an impenetrable "electrical firewall," providing the most fail-safe power protection available.

Designed to protect the most critical equipment used in data centers, voice and data communications, security systems, and light industrial applications. The Encompass Series is SNMP-capable (card optional) and allows full-device management using Minuteman's SentryHD<sup>™</sup> power monitoring and control software.

The Encompass product line is a value-priced on-line UPS solution that provides an outstanding set of features, true sinewave output, a 3-year warranty (including batteries), and is designed to meet the reliability expectations of even the most demanding critical applications. Two form factors are available in the Encompass Series: a tower-only version (EC-LCD) and a rack/tower version (EC-RT).



\$150,000 Platinum Protection Plan® (US and Canada)

## **Encompass Physical Specifications**

Model No.	EC1000RT2U	EC1500RT2U	EC2000RT2U	EC3000RT2U
Unit Size (L x W x H) (with rack ears installed)	16" x 18.9" x 3.5" 407 x 479 x 88mm		3.9" x 3.5" 9 x 88mm	23.7" x 18.9" x 3.5" 602 x 479 x 88mm
Unit Weight	24.3 lbs. / 11 Kgs.	44.1 lbs.	/ 20 Kgs.	61.1 lbs. / 27.7 Kgs
Model No.	EC1000LCD	EC1500LCD	EC2000LCD	EC3000LCD
Unit Size (L x W x H) (with rack ears installed)	15.9" x 6.1" x 10.2" 403 x 154 x 258mm		8" x 11.4" x 288mm	22.4" x 7.6" x 12.6" 567 x 192 x 320mm
Unit Weight	28.2 lbs. / 12.8 Kgs	48.1 lbs. /	21.8 Kgs.	73.0 lbs. / 33.1 Kgs
Extended Battery Packs (I	For LCD models only)			
BP Part Number	BP24XL	BP4	8XL	BP72XL



**Encompass Rack/Tower** 



**Encompass LCD Tower** 

## **EnterprisePlus LCD Series**

750VA-3kVA True Sine Wave AVR Rack / Tower

The latest in Minuteman's popular Enterprise Series, the EnterprisePlus LCD offers users more of what has made the series one of our best selling lines. Features include lower cost standard runtime models, an informative LCD Display, and additional outlets vs. previous models.

The EnterprisePlus LCD Series of UPSs offer complete protection from all electrical problems, including spikes, surges, sags, brownouts, and blackouts, in a versatile rack / tower convertible format. True sine wave output ensures the best power for sensitive electronic equipment.



### Key Product Line Features



## LCD Display Real-time updates on power and status

Stay up to-date-on all aspects of your power with EnterprisePlus LCD's control panel.

- 1 Unit Status Indicator AC normal, On-battery, Weak/Bad Battery, Faults
- 2 Load and Battery Meters Monitor battery status, electrical load on unit
- 3 Numeric Display Power status including voltage, frequency, estimated runtime remaining, kilowatt, and volt amp load
- 4 Display Scroll Button Quickly browse status screens to monitor power
- 5 Alarm Silence Button Silences battery mode warning alarm
- 6 On/Off/Test Button Power unit up or down, perform self test

RoHS



EnterprisePlus LCD UPS shown in rackmount and tower configurations using included mounting hardware

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**Minuteman Power Technologies** 

20

## EnterprisePlus LCD UPS

Standard features include:

- 0.8 and Greater Power Factor Get increased capacity without migrating to larger models
- Hot-Swappable Batteries
- Load Shedding Two independently controlled power banks allow equipment prioritizing for increased runtime (+ always on segment)
- Independent Battery Bypass
   Provides voltage regulation with surge and spike protection even
   when batteries are weak or dead
- Virtually Unlimited Runtime with XL Models No limitation on the number of external battery packs
- Alarm Silence Button on Front Panel
   Silence the alarm during outages without need for software
- Flexible Installation Format
   Rack or tower configurable; wallmount kits available
- Small Form Factor
   3.5-inch (2U) Rack / Tower case
- Versatile Communications
   Simultaneous RS-232, USB and SNMP
- Minuteman SentryHD
   UPS monitoring and control software included
- Easy to Read LCD Display
   With load/battery meter, unit status, alarm indicators
- Dedicated Remote Emergency Power Off (EPO) Safely and quickly shut down power in emergencies
- 120V and 208/240V
  208V models available (1500 and 3000VA models)
- RoHS 2 compliant
   Meets EU standards for reduction of hazardous materials
- Industry Leading Product Protection
   Standard 3-year electronics and battery warranty with
   non-prorated battery coverage; \$100,000 Platinum Protection
   Plan (US and Canada)

## Accessories

### Get the most from your UPS with these options

 SNMP Communications Cards Monitor and manage EnterprisePlus LCD via network; see page 19 for complete details



SNMP-NETSNMP-NV6

E BRKT WALL
E BRKT RAIL
E BRKT 23

Mounting Accessories Additional mounting options to fit your needs



5-Year Warranty Plans See page 5 for complete details



- Standard Plan
- Premiere Plan

## Specifications Complete spec table at minutemanups.com/enterprisepluslcd

Add "NC" to model numbers for pre-installed SNMP-NV6 card						
Standard Runtime Extended Runtime	E750RT2U E750RTXL2U	E1000RT2U E1000RTXL2U	E1500RT2U E1500RTXL2U*	E2000RT2U E2000RTXL2U	E3000RT2U E3000RTXL2U*	
VA/Watts	750/600	1000/800	1500/1200	2000/1760	3000/2560	
Battery Module No.	BM0029	BM0029	BM0030	BM0031	BM0032	
Runtime (min) Half/Full load	17/8	15/5	11 / 4	13/5	8/3	
Receptacles (Qty and Power)		5-15R (8 UPS)		5-15/20R (8 UPS) L5-20R (1 UPS)	5-15/20R (7 UPS) L5-30R (1 UPS)	
Input Plug	5-15P	5-15P	5-15P	5-20P	L5-30P	
Cord Length (ft)			10			
Communications Ports	RS-232, USB, SNMP Option Slot					
Dimensions (in / mm) L x W x H					i10.0 x 482.6 x 89.0 < height)	
Net Weight (lbs / kg)	41.2 / 18.7	43.7 / 19.8	44.1 / 20.0	72.1 / 32.7	78.0 / 35.4	

\*208/240V models also available (RTXLT2U)



7 SNMP Option Slot

1 Remote EPO Connection 2 USB Comm. Port

4 Output Voltage Dipswitch

3 RS-232 Comm. Port

5 Network/Phone Surge Protection6 External Battery Connection

8 Output Receptacles (Load 1)

9 Output Receptacles (Load 2)
 10 Output Receptacles (Load 3)
 11 Input Circuit Breaker
 12 10 ft. Power Cord

## **Extended Runtime Options** Hours of protection for extended outages

Increase runtimes substantially and economically with XL (top) and EXL (bottom) extended runtime battery packs for EnterprisePlus LCD. These units can be daisy-chained for virtually unlimited capacity and runtime.



UPS Model	E750RTXL2U	E1000RTXL2U	E1500RTXL2U	E2000RTXL2U	E3000RTXL2U	
XL Battery Pack Model No.	BP36RTXL			BP72RTXL		
Dimensions (in / mm) L x W x H	17.0 x 19.0 x 3.5 / 432 x 482.6 x 89 (2U rack height)			17.0 x 19.0 x 3.5 / 4 (2U rack)		
Weight (lbs / kg)		52.2/23.7		56.0 /	25.4	
Battery Module		BM0033		BM0	034	
Internal Charger		Yes	Yes		s	
Recharge Time		8 hours		8 hours		
EXL Battery Pack Model No.		BP36RTEXL		BP72R	TEXL	
Dimensions (in / mm) L x W x H		26.8 x 17.3 x 5.2 / 680 x 440 x 132 (3U rack height)				
Weight (lbs / kg)	127.9 / 58.1					
Battery Config.	12V / 9.0Ah (18)					

Learn more about Extended Runtime options at minutemanups.com/exl

## **PRO-RT Series**

750VA, 1000VA, 1500VA, and 2000VA AVR Rack / Tower

The PRO-RT Series is a value-priced, yet feature-rich UPS incorporating line-interactive technology that preserves battery power by providing voltage regulation during voltage sags and surges. The PRO-RT Series can be used to support servers, telecom or VoIP systems, security systems, plus many other applications.

An LCD display provides visual notification of power status, including input voltage, frequency, percent of battery charge, estimated runtime, plus many other conditions.



## Economical rackmount protection

**Applications** 

Power information in real time

Key Product Line Features LCD Status Display



Medium-large DVR/NVR, POE

Automatic Voltage Regulation

Longer runtimes and battery life span

Security

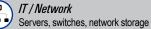
A

AVR

Simulated Sine Wave

Communications

Telephone systems, VoIP



SentryHD Download

Monitor and manage via USB

Capacity:

## 🔘 Sm 🔘 Med 🥥 Lrg

3-yr Non-Prorated Warranty

Unmatched peace of mind

Independent Battery Bypass

Regulation w/ dead or weak batteries

## LCD Display Real-time updates on power and status

Stay up-to-date on all aspects of your power PR01500T2U with PRO-RT's control panel. 2 1 Unit Status Indicator AC normal, On-battery, Overload 3 2 Load and Battery Meters Monitor battery status, electrical load on unit 3 Numeric Display Power status including voltage, frequency, Ċ 5 2 6 Δ estimated runtime remaining, error codes, site-wiring fault, output load 4 Display Scroll Button Quickly browse status screens to monitor power 5 Alarm Silence Button Silences battery mode warning alarm 6 On / Off / Test Button Power unit up or down, perform self test PR01500T21 MINUTE .: MAN RoHS Ċ



PRO-RT UPS shown in rackmount and tower configurations using included mounting hardware

## Minuteman Power Technologies

## **PRO-RT UPS**

Standard features include:

- · Easy to Read LCD Display Shows UPS operating status, input and output power status, estimated runtime remaining, and error codes
- Flexibility in Installation • Rack or tower configurable; wallmount kit optional
- Minuteman SentryHD Free downloadable SentryHD auto-shutdown and monitoring software
- USB Communications **HID Compliant**

No special USB drivers are required for USB communications

 SNMP Compatible Each PRO-RT unit can be managed on a network with the addition of an optional SNMP management card

## Accessories

### Get the most from your UPS with these options

- SNMP Communications Cards Monitor and manage Pro-RT via network; see page 19 for complete details
  - SNMP-NET SNMP-NV6



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**Mounting Accessories** 

• E BRKT RAIL

Network / Fax / Phone/ Coax Protection

Industry Leading Product Protection

Hot-Swappable Batteries

weak or dead

Load Shedding

Independent Battery Bypass

\$100,000 Platinum Protection Plan® (US and Canada)

Allows battery replacement without shutting down the UPS

connected loads to extended runtime for critical equipment

The PRO-RT UPS provides a low cost means of protecting network, fax, and phone lines from spikes and surges. The RJ11/RJ45 port supports network speeds up to 1Gb

Standard 3-year electronics and battery warranty with non-prorated battery coverage;

Provides voltage regulation with surge and spike protection even when batteries are

2 indecently-controlled load banks (and 1 always-on bank), allows prioritization of

**E BRKT 23** 

10



Standard Plan

- **Premiere Plan**
- 1 Input Circuit Breaker
- 2 Input Power Cord
- 3 Coax Surge Protection
- 4 Emergency Power Off 5 Fan
- 6 USB Port
- 7 RJ11/RJ45/Fax/Modem Network Protection
- 8 Controllable Output Receptacles (6)
- 9 Always On Receptacles (2)
- (Only one L5-20R on PRO2000RT2U)
- 10 Option Card Slot

## Specifications Complete spec table at minutemanups.com/prort

Add "NC" to model numbers for	pre-installed SNMP-NV6	card						
Model No.	PRO750RT2U	PRO1000RT2U	PRO1500RT2U	PRO2000RT2U				
VA/Watts	750/525	1000/700	1500/1050	2000/1400				
Battery Module No.	BM0072	BM0073	BM0074	BM0075				
Runtime at Half-Full-Rated Load	15 (5) Minutes		14 (4) Minutes					
Receptacles (Qty and Power)	(8) NEMA 5-15R	(8) NEMA 5-15R	(8) NEMA 5-15R	(6) NEMA 5-15/20R / (1) L5-20R				
Input Plug		NEMA 5-15P		NEMA 5-20P				
Cord Length (ft)	10							
Status Display Type	LCD							
Communications		USB, SNN	1P Option Slot					
Dimensions LxWxH (in / mm)	16.1 x 18.9 x 3.4 inches	s (409 x 480 x 86 mm)		9 x 3.4 inches 80 x 86 mm)				
Net Weight (lbs / kg)	31.3 / 14.2	35.7 / 16.2	48.7 / 22.1	62.8/28.5				
Operating Temperature		0° to +40°C	/ +32° to +104°F					
Warranty		3-year incl	uding batteries					
Approvals	cTUVus (Conforms to UL1778 5th Edition & CSA 22.2 no. 107.3-14 /R: 2014) FCC Class B, CE certified, RoHS2 (EU Directive 2015/863/EU)							

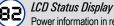
## **Entrepid Series**

500-1500VA Line-Interactive AVR Tower

The Minuteman Entrepid Series UPS is a compact tower featuring automatic voltage regulation and an informative LCD display that keeps users informed of power and unit status. Six battery/surge outlets along with two surge-only outlets ensure a connection for every device in the system, and phone/fax/network surge protection is also included. USB communications make management simple thanks to free SentryHD software, downloadable at minutemanups.com/sentryhd.

The Entrepid's compact height and width makes it an ideal solution for applications where space is tight. This can include crowded telephone and network closets, security devices, POS systems, and much more.

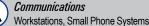
Key Product Line Features



Power information in real-time



Applications



Automatic Voltage Regulation

VA/Watts

**Battery Module** 

Runtime (min)

Half/Full load

Receptacles

Input Plug

Approvals

Information

Canada)

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(Qty and Power)

Cord Length (ft)

**Communications Ports** 

Net Weight (lbs/kg)

· UPS status and condition

Battery capacity bar graph

Load capacity bar graph

Warning / Fault icons

Dimensions (in/mm) LxWxH

LCD Display Provides Real-Time

Estimated runtime AC and DC modes

Industry Leading Product Protection

• \$100,000 Platinum Protection Plan (US and

Longer runtimes and battery life span

A



Specifications Complete spec table at minutemanups.com/entrepid

EP500LCD

500/300

BM0059

11/3

14.9/6.7

IT/Network Switches, Hubs, Access Points

SentryHD Management Software

EP700LCD

700/420

BM0060

12/3

Monitor and manage via USB

≘



EP1500LCD

1500/900

BM0062

3-yr Electronics Warranty

2-yr non-prorated battery

## Features

- Automatic Voltage Regulation (AVR) Line-Interactive technology that preserves battery power by providing voltage regulation during voltage sags and/or surges
- Compact case design and LCD panel display ٠
- **USB** communications
- Hot-swappable batteries
- Easy battery access
- RJ11/45 Network/Phone/Fax protection
- 3-year warranty (electronics) 2-year warranty (batteries)
- **RoHS 2 compliant**
- Transformer-friendly receptacles
- DC startup capability
- Independent Battery Bypass
- Built-in self-diagnostics testing
- Site-wiring fault indicator
- Audio & Visual alarms

### **Compatible with Minuteman SentryHD Management Software**

- Automatically saves and shuts down unfinished applications
- Gracefully powers down your PC during extended blackouts
- Provides comprehensive monitoring capabilities
- Integrates into SNMP network (when connected to a computer via USB port)
- Free download at minutemanups.com/sentryhd

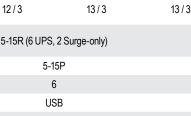
# RoHS



- 2 On/Off/Test and Display Scroll 3 Phone/Fax/Network Protection
- 4 USB Communication Port
- 5 Two (2) Surge-only 5-15R outlets
- 6 Six (6) Battery Backup & Surge 5-15R Outlets
- 7 6-ft. Power Cord
- 8 Input Circuit Breaker

## Minuteman Power Technologies

Entrepid 500-1500VA Line-Interactive AVR Tower



EP1000LCD

1000/600

BM0061

## **Entrust LCD Series UPS**

550-1500VA Line-Interactive AVR Tower

The Minuteman Entrust LCD Series UPS provides users all the features usually available in higher-priced UPS products to protect your valuable equipment: automatic voltage regulation, spike and surge protection, and battery backup, all in a surprisingly compact package. Entrust LCD's compact footprint makes it an ideal solution for cramped spaces including network and security closets.

- Efficient Automatic Voltage Regulation (AVR) Line-Interactive technology that preserves battery power by providing voltage regulation during sags and/or surges
- Compact Form Factor
- Tool-less Battery Access
   Easy setup & maintenance with tool-less battery panel
- · Easy to Read LCD Display
- Total Control of Your Power
   Downloadable Minuteman SentryHD management software
- Hot-Swapppable Batteries
- Independent Battery Bypass
   Provides voltage regulation with surge and spike protection
   even when batteries are weak or dead
- Industry Leading Product Protection Standard 3-year electronics warranty with 2-year non-prorated battery coverage



## Key Features & Specifications minutemanups.com/entrustlcd

82 LCD Status Display	Sentry	/HD Managemen	nt Software	3-yr Warranty
Model No.	ETR550LCD	ETR700LCD	ETR1000LCD	ETR1500LCD
VA/Watts	550/330	700/420	1000/600	1500/900
Battery Module	BM0063	BM0064	BM0065	BM0066
Runtime (min) Half/Full load	12/3	12/3	12/3	12 / 3
Receptacles (Qty and Power)	5-15R (4 UPS,	4 Surge-only)	5-15R (5 UPS)	5 Surge-only)
Input Plug		5-1	15P	
Cord Length (ft)			6	
Communications Port		U	SB	
Dimensions (in/mm) LxWxH	11.3 x 3.4 x 11 /	287 x 86 x 279	16.1 x 3.4 x 11 /	408 x 86 x 279
Net Weight (lbs/kg)	13.9 / 6.3	15.7 / 7.1	22.0 / 10.0	26.0 / 11.8

## **Enspire Series UPS**

350-900VA Standby Low-Profile UPS

The Minuteman Enspire Series UPS is a low-cost, high performance UPS ideally suited for desktop PCs, small network devices, security system components, and much more. Enspire provides complete power protection in a compact, wall-mountable package suitable for installation in even the tighest spaces and budgets.

- Versatile Connection Options
   8 (350 and 550) or 10 (750 and 900) outlets
- Compact, Wall-Mountable Case
- USB Communications (HID Compliant)
- Single Line RJ11/45 phone/fax/network Protection
- Features on 750 and 900VA LCD Models:
- Easy to Read LCD Display
  Real-time updates on system and power status, estimated
  runtime remaining based on attached load
- Green Mode
   Lower power consumption mode during off-time
- Coax Protection
- Tool-less Battery Access
- Independent Battery Bypass
- Industry Leading Product Protection
   Standard 3-year electronics warranty with 2-year non-prorated
   battery coverage



## Key Features & Specifications minutemanups.com/enspire

<b>B2</b> LCD Status Dis (EN750, EN9200)	play 🖓 St	entryHD Software	2-yr B	Battery Warranty		
Model No.	EN350	EN550	EN750LCD	EN900LCD		
VA/Watts	350/200	550/300	750/450	900/500		
Battery Module No.	BM0067 BM0068					
Runtime (Half/Full) min.	12/3	11 / 3	11/3	11 / 3		
Receptacles (Qty and Power)	5-15R (4 UPS , 4 Surge-only) 5-15R (5 UPS , 5 Surge-only)					
Input Plug		5-15	δP			
Cord Length (ft)		4		6		
LCD Display	No	No	Yes	Yes		
Communications Ports		USB (excep	ot EN350)			
Dimensions (in/mm) LxWxH	12.4 x 5.1 x 3.7	/ 316 x 130 x 94	12.6x7.2 x 3.6	/ 320 x 183x 92		
Net Weight (lbs/kg)	6.2 / 2.8	6.4 / 2.9	7.7 / 3.5	8.4 / 3.8		

## SentryHD Power Manager

Monitoring and Management Software

SentryHD is the latest update to Minuteman's popular Sentry monitoring and management software. This powerful tool provides users and network managers a range of monitoring and management tools for their power, allowing total control before, during, and after power problems.

With a simple connection to the UPS via USB or RS-232, SentryHD provides the capability to configure UPSs, monitor power, and diagnose issues, all from secure connections on the network. SentryHD allows administrators to eliminate wasteful service calls around the facility, saving significant time and money.

MINUTE		N.	Sentry	HD Class
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EnterprisePlus LCD, Endeavor 5-10kVA, Endeavor LCD, Encompass,

### Key Product Line Features



### Auto Notification User-configurable alarms

*Power Status Logging* Easily analyze power

## **Features**

- Versatile Communications
   SNMP/Ethernet compatibility
- Wide-Reaching Management Capability Concurrent monitoring through single or multiple computers via RS-232 and USB
- NMS Integration Supports SNMP v1, v2c, and v3 traps for integration into Network Management Systems
- Secure Connection HTTPs and SSL support
- TCP / IP Network
   Remote monitoring, control, multi-computer shutdown/restart and configuration through TCP/IP network
- Multiple Device Management Monitor and control multiple UPS devices from a single application session

### Ultimate Control and Knowledge of Your Devices:

- Real-time graphical displays of user-defined UPS and utility conditions
- Record and save graphical event and history logs for future analysis
- Device control restart, test UPS and control receptacles
- Powerful reporting full diagnostic and event reporting, printable history, event logs and security measures
- Real-time monitoring displays UPS data (voltage, frequency, load percentage, etc.)

#### SentryHD Compatibility:

- Compatible with most new generation Minuteman UPS products; older products use previous versions, see product user manual for details on compatibility
- Windows 10, 8, 7 (32-bit/64-bit), Vista (32-bit/64-bit), Server 2008 R1 (32-bit/64-bit), Server 2008 R2 (64-bit) and Windows XP/2000/2003
- Unix and Linux

## Maximize Efficiency Learn more at minutemanups.com/sentryhd

ETR-LCD, Enspire, Entrepid

Utilizing SentryHD saves time and money. Configurable automatic actions to reduce downtime, increase efficiency:

System Compatibility

- Save Power Automatically
   Perform scheduled shutdowns and restarts
- Auto-Save Saves files before graceful operating system shutdown
- Automatic Notifications
   Email, SMS, and SNMP network broadcast of
   user-defined UPS events

### **Simplified Configuration Operations**

Batch Configuration
 Configure multiple devices at once with
 easy-to-use batch configurations



SNMP Integration Connects to NMS

#### **Powerful Logging Tools**

 Record and Save Monitor and analyze power status with powerful graphs and reports





## SentryPlus Software Legacy version - wider UPS compatibility

- Wider Compatibility Compatible with most current Minuteman UPS products including Enspire, PRO-RT, and Endeavor LCD 1-3kVA, Endeavor 6/10 kVa towers
- Monitor, Manage, and Safely Shutdown for Minuteman UPSs
- NMS Integration
   Supports SNMP v1 traps for integration into
   Network Management Systems
- 32 & 64-bit Compatibility
   Windows 7, Vista, Server 2008 R1 & R2, XP/2000/20003; Unix, Linux

Minuteman Power Technologies

## **SNMP** Monitoring Accessories

Monitor and Manage Power via Network

Minuteman SNMP cards are an interface between the UPS and the network. Cards can communicate the status of and issue commands to the UPS. All Minuteman SNMP cards support SNMP and HTTP protocols for user access. Through the SNMP NMS and/or web browser, users can monitor the UPS status, issue commands, and set up the SNMP card via a network connection.

A full line of monitoring accessories are also available. With these additional modules, admins can monitor temperature and humidity, detect smoke, fire, or water, sense vibration, and monitor the status of server rack or cabinet doors. Each of these modules can send an alert via SNMP trap or email, ensuring problems can be rapidly resolved without the need for a 24-hour presence at a facility.



### Key Product Line Features

special application software

System (NMS)

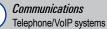


**Features** 

Auto Notification User-configurable alarms Environmental Monitoring Multiple monitoring accessories Applications

IT / Network Monitor devices from single location





Compatible UPS Systems 🕥 PRO-RT

Connect the UPS Directly to a Network Utilizes a standard RJ45 Ethernet connection; requires no

EnterprisePlus LCD Endeavor 5-10VA Rack / Tower, 6 and 10kVA Tower



**Specifications** Complete spec table at minutemanups.com/snmp

Model No.	SNMP-NV6
Network Connection	RJ-45 Jack Connection
Operating Temperature	0 ~ 40° C
Operating Humidity	10 ~ 80 %
Power Input	9~24V DC
Power Conusmption	2 Watt Maximum
Dimensions (in/mm) LxW	5.12 x 2.36 / 130 x 60
IPv6 Compatible	$\checkmark$
SYSLOG Support	$\checkmark$
Batch Configurable	√
SNMP Compatibility	v1, v2C, v3
Configurable Event Alarms	✓

## **Network UPS Management** Monitor and manage the UPS over any web browser Integrate UPS into Network Management Using the included MIB (Management Information Base) agent or the included SNMP management software

- **Schedule Events** Shutdown or restart connected equipment daily, weekly, or monthly using the integrated scheduler
- Track Utility Problems via Event Logs To provide history of power events on the UPS including: power quality, equipment draw, and blackouts
- **Multiple Server Shutdown** Using the included SNMP management software allows the UPS to shutdown multiple devices sequentially when a power event occurs
- **Event Notification** Notify multiple IT personnel via SNMP traps or email when a power event occurs
- **Telnet Support** For flexible configuration of the SNMP card

## Accessories Add monitoring devices for total awareness



Add an ENV-PROBE to your SNMP card for a complete monitoring solution for networks.

 Temperature and Humidity Monitoring Measure the environmental conditions of the area the UPS is in and receive warnings of any abnormalities. Optional contact closures for smoke, fire, water, and intrusion are available.

Model No.	ENV-PROBE
Size (in / mm)	2.6 x 2.0 x 1.4 / 66 x 50.8 x 35.5
Temperature Measurement	0 ~ 65° C 32 ~ 149° F
Humidity Measurement	20~90%
Power Input	12V DC
Power Consumption	400 mw

## **Remote Power Management (RPM)**

2, 8, 16, and 24-port Remote Management Solutions

Minuteman's RPM series of products are IP-addressable RPMs that allow administrators and technicians to remotely control the power to connected servers, network equipment, and security devices, eliminating the need for wasteful service calls to reboot unresponsive locked-up devices.

Each RPM also has the capability to perform scheduled shutdowns and startups, offering additional cost savings via reduced energy consumption. When a device experiences a lock-up, the RPMs can automatically notify administrators and users via email, SMS, or SNMP traps, while also allowing user-configurable actions.

Key Product Line Features



Auto Notification Configurable SMS, email, traps

## Maximum Efficiency

Minuteman RPM units maximize admin and technician efficiency by providing a secure connection, accessible from any standard web browser. Securely monitor and manage power from any PC, smartphone, or tablet with no special apps, or software installs.

- Automatic Notification Receive notification of power events, unresponsive equipment, and more via SMS text (2-port only), email, or SNMP trap
- **Control Individual or Groups** of Outlets

Configurable outlet control lets the user meet their needs

Scheduled Shutdown and Startup

Save energy and prevent lockups by scheduling regular shutdown and startup of equipment



## Easy-to-Use Interface

Mobile Accessible

Secure login via web server



RPM1521E 2-port Remote **Power Manager** 

RPM1521E (above) and RPM 8 and 16-port interface main screens

Example RPM System Integration

# Applications

Network Devices Switches, routers, hubs



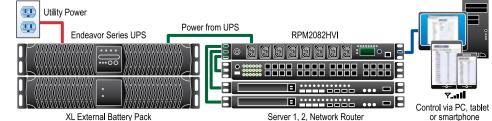


Security DVR, camera

#### 3-Year Warranty

#### **Ultimate Power Control** Power up or down ports individually or together; delayed start and shutdown

- Secure Management Features SSL browser support, user name / password protection, IP address filtering
- Schedule Around Your Needs Regular startups, shutdowns, or reboots yearly, monthly, weekly, or daily to prevent lockups
- Auto Ping Function Receive notifications of equipment lockups the moment they happen with user-configurable ping actions
- Multiple Account Capability Secure access for multiple users, with controls for user access to individual ports
- **Choose Your Alert** Email, SMS, or SNMP trap
- Powerful Logging Browse event logs to see all activity on device
- 8, 16 and 24-Port Models also Feature:
- Enterprise Management Utility Manage multiple RPM units from a single consolidated interface



Utilize a Minuteman RPM unit in conjunction with a UPS to ensure fail-safe, controllable power. In this example, conditioned and backed up power from the UPS is provided to multiple servers and a router from the RPM2082HVI.

Server 1, 2, Network Router

Control of power to these devices is accessed from the web browser of PCs, smartphones, or tablets located both within the network and abroad thanks to the RPM's secure webserver functionality.

## Minuteman Power Technologies

Remote Power Manager (RPM) Manage Power from Anywhere

## 2-Port Remote Power Manager (RPM1521E)

### Standard features include:

- IP-Addressable PDU Built-in web server and 2 power outlets
- Manual Power ON / OFF Switch
- Independent Outlet Control
   Switch on / off, power cycle, schedule startup/shutdown
- Supports Power Start Sequencing
   Startup equipment in specific order based on need
- Auto Ping Feature Monitor and auto-detect any failed network equipment and perform a timed reboot
- IP Filter / Mask Function
  Manage user privileges and prevent unauthorized access
  to the control menu

Allows rebooting from any internet-enabled device via a

Configure and control RPM units worldwide through most standard web browsers using a single network IP address

10-ft power cord and rack-mount hardware for a wide

**Conserve Energy and Prevent Lockups** 

8, 16 and 24-Port Remote Power Manager

Optional Temperature Probe

Standard features include: • Access from Anywhere

secure connection

Allows scheduling of tasks

Secure Management

Versatile Installations

range of installations

Password-protected security levels

No Special Apps or Installs

•

•

•

# Power Status and Control Mode LED Indicators

- Instant Notification of Alarms
   Receive email, SMS text messages or SNMP trap
   notification of events
- Surge-Protected Outlets Eliminate potentially damaging voltage spikes
- Circuit Breaker
   Overload and connected equipment protection
- Rack-Mountable Design Holes on each side of the enclosure for optional rack-mounting kit (BRKT RM RPM1521)
- Warranty
   3-years parts and labor

Power for All of Your Devices

15, 20 and 30-amp capacities, 120 and 208VAC

• True RMS Load Meter and LCD Display

1U / 0U Convertible or 0U Vertical-Only

 \$30,000 Minuteman Platinum Protection Plan (US and Canada only)



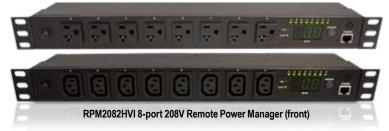


RPM1521E

RPM20161VN and RPM20162VI 16-Port Remote Power Manager

- Optional Temperature
   & Humidity Probe
   Available for all EV6 models
- SNMP and DNS Support
   Warranty
- 3-years parts and labor

RPM1581HVN 8-port Remote Power Manager (front)



## Specifications Complete spec table at minutemanups.com/rpm

Model No.	RPM1521E	RPM1581EV6	RPM30241EV6	RPM30242EV6	RPM1581HVN	RPM20161VN	RPM2082HVI	RPM20162VI	
Input and Output Voltage	120	120 120 208		12	120		208		
Number of Outlets	2	8	24	24	8	16	8	16	
Install Format	Free/1U optional	1U/0U	0U	0U	1U/0U	0U	1U/0U	0U	
Dimensions L x W x H (in / mm)	7.2 x 4.9 x 1.7 182 x 125 x 44	17.0 x 8.5 x 1.8 432 / 216 / 44.5	70 x 2.2 x 3.2 1778 x 56 x 80	70 x 2.2 x 3.2 1778 x 56 x 80	17. x 3.5 x 1.7 432 x 90 x 44	49.0 x 2.2 x 1.7 1245 x 56 x 44	17.x 3.5 x 1.7 432 x 90 x 44	49.0 x 2.2 x 1.7 1245 x 56 x 44	
Input Power Cord	IEC320 C13 to 5-15P	5-15P	L5-30P	L6-30P	5-15P	5-20P	6-2	20P	
Cord Length (ft)	6	10		10		10			
Output Receptacles (Qty - Type)	<b>2</b> - 5-15R	<b>8</b> - 5-15/20R	<b>24</b> -5-15/20R	3-IEC320 C19 21-IEC320 C13	<b>8</b> - 5-15/20R	<b>16</b> - 5-15/20R	8 - IEC320 C13	2 - IEC320 C19 14 - IEC320 C13	
Input Circuit Breaker	15A	15A	30A	30A	15A	20A	20A	20A	
Maximum Capacity	12A	12A	24A	24A	12A	16A	16A	16A	
Display Type	LED - Unit/Equipment Status		LCD + Status LED		LCD + St	LCD + Status LED		LCD +Status LED	
Net Weight (lbs / kgs)	1.78 / 0.806	7.94 / 3.6	18.52/8.4	18.74 / 8.5	4.85/2.2	8.82/4.0	4.63/2.1	8.15 / 3.7	
Power On/Off Sequencing	$\checkmark$	~	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	~	
Event Alert Types	Email / Trap / SMS		Email / Trap / Audible		Email / Trap / Audible		Email / Trap / Audible		
SYSLOG Support	Yes		Yes		Yes (w/SW Utility)		Yes (w/SW Utility)		
Safety Certification	cTUVus, CE Certified	cUL	., UL60950-1, CE Cei	tified	cUL, UL60950-1, CE Certified		cUL, UL60950-1, CE Certified		

## **OEPD Power Distribution Units (PDUs)**

8-24 Outlet Solutions for Safely Distributing Power to Equipment

Complete your power system installation with high quality PDU solutions from Minuteman. OEPD series PDUs feature lengthy power cords, versatile configuration options, and a host of premium features, all at an incredible value.

Minuteman's robust PDU line offers products ranging in capacity from 15 to 30 Amps, in both vertical and horizontal orientations. In addition, select models feature surge suppression and load metering. OEPD power cords are strain-relieved with molded plugs, and use heavy-gauged cables. All models have an external ground stud.



Communications

**Telephone Systems** 

Security

DVR, IP-video

Key Product Line Features



208V Available Tel/network solution



### Longer Power Cords

Most Minuteman PDU units have 15-ft power cords, eliminating the need for 6-, 8-, or 10-ft alternatives

### More Standard Outlets

Minuteman PDU units have 6, 8, 10, 12, 14, 18, or 24 outlets. Most of the Minuteman PDUs have additional front outlets for improved access

#### Configuration Versatility

Minuteman PDU units have a multi-form factor with 1U and 0U configurations allowing for either horizontal or vertical placement. 1U products ship with a stand-off mounting bracket, at no additional cost, that allows for vertical installation on most racks and enclosures

- Locking Input Plugs (L) Select models (L) feature locking input plugs for added security
- Surge Protection (OES) OES models provide surge protection for connected devices
- Load-Metering (A) Amp-metered units (A) are available to display connected equipment loads

### High Standards

PDUs are listed with higher UL 60950-1 standards. All PDUs are compatible with any data center or network installation

#### Cost Effective

More outlets, longer cords and more features are what make the OEPD Series the best value today. The features are all standard with the series

#### Higher Reliability

Designed to provide maximum uptime, Minuteman PDUs' switchless design and on/off LEDs provide greater MTBF (Mean Time Between Failure)

#### Protected Investment

Minuteman surge-protected (OES) PDUs carry a limited lifetime warranty and \$50,000 Minuteman Platinum Protection Plan (US and Canada only)



Applications

Data Center / Rack

Server, Network

Warrantv

Limited Lifetime

Model	Outlet Type	Qty (f/r)	Mounting Format	Locking	Surge	Metered
	Generic PDU v	/o Minutema	an Label: 120VAC Input/O	utput		
OEPD615HV	NEMA 5-15R	6/0	1U Horiz. / 0U Vert.	-	-	-
OEPD615V12PC6	NEMA 5-15R	6/0	0U Vert.	-	-	-
OEPD815HV	NEMA 5-15R	2/6	1U Horiz. / 0U Vert.	-	-	-
OEPD1415HV	NEMA 5-15R	6/8	1U Horiz. / 0U Vert.	-	-	-
OEPD1415HVA	NEMA 5-15R	6/8	1U Horiz. / 0U Vert.	-	-	$\checkmark$
OEPD1815V48	NEMA 5-15R	18/0	0U Vert.	-	-	-
OEPD2415V62	NEMA 5-15R	24/0	0U Vert.	-	-	-
OEPD1020HV	NEMA 5-15/20R	2/8	1U Horiz. / 0U Vert.	-	-	-
OEPD1020HVL	NEMA 5-15/20R	2/8	1U Horiz. / 0U Vert.	$\checkmark$	-	-
OEPD1420HV	NEMA 5-15/20R	6/8	1U Horiz. / 0U Vert.	-	-	-
OEPD2420V62	NEMA 5-15/20R	24/0	0U Vert.	-	-	-
OEPD2420V62L	NEMA 5-15/20R	24/0	0U Vert.	$\checkmark$	-	-
OEPD2420VA62L	NEMA 5-15/20R	24/0	0U Vert.	$\checkmark$	-	$\checkmark$
OEPD2430V48DCL	NEMA 5-15/20R	24 / 0	0U Vert.	$\checkmark$	-	-
G	Generic Surge-protecte	ed PDU w/o N	/linuteman Label: 120VAC	Input/Output		
OES1015HV	NEMA 5-15R	2/8	1U Horiz. / 0U Vert.	-	$\checkmark$	-
OES1020HV	NEMA 5-15/20R	2/8	1U Horiz. / 0U Vert.	-	$\checkmark$	-
OES1020HVL	NEMA 5-15/20R	2/8	1U Horiz. / 0U Vert.	$\checkmark$	✓	-
OES620V16PC6	NEMA 5-15/20R	6/0	0U Vert.	-	~	-
	Generic PDU v	/o Minutema	an Label: 208VAC Input/O	utput		
OEPD1220C13HVLT 1	IEC320 C13	12/0	1U Horiz. / 0U Vert.	~	-	-
OEPD2430V48DCLT 1	IEC320 C13	24 / 0	0U Vert.	~	-	-
	Minuteman La	beled PDU: 1	120VAC Input/Output, 15-	Amp		
MMPD1815V48	NEMA 5-15R	18/0	0U Vert.	-	-	-
MMPD2415V62	NEMA 5-15R	24/0	0U Vert.	-	-	-

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## **MMS Surge Protectors**

Protect non-critical equipment from spikes and surges

Minuteman's MMS Series surge protection products are perfect for protecting devices which will not be required during an outage. Models ranging from travel friendly, single-outlet wall taps to feature-rich rotating outlet strips are available, and each provides exceptional protection at a tremendous value.



**MMS130RC Slimline** Surge Protector

## Key Product Line Features

X3 MOV Surge Technology Advanced hardware prevents fire





Applications Home Theater AV equipment



Office / Workstation Non-critical perhipherals



IP-video, DVR, POE

MMS7120RCT Rotating **Outlet Surge Protector** 

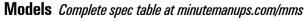
## **MMS** Features

- **Substantial Surge Ratings** Ratings up to 4320J ensure maximum protection
- X3 MOV Safety Advanced technology prevents fire from surges
- · Versatile Solutions Rotating outlet and slimline products provide innovative solutions for powering your equipment
- Phone / Fax/ Network (T) and Coax (C) • Protection

Protect from damaging spikes and surges over data lines

 UL1449, UL1363 and cUL Certified Select models also UL452 certified

**Worry-Free Protection** • Limited lifetime warranty on properly connected equipment protection up to \$200,000 (US and Canada only)



					_			
Model	Joule Rating	Outlet Qty	Rotating Outlets	Phone/ Fax	Coax	Dimensions (in.)	Cord Length	Protect. Indicator
MMS110	540	1	-	-	-	2.13 x 2 x 2.38	-	~
MMS130C	1080	3	-	-	$\checkmark$	4.02 x 4.02 x 2.28	-	$\checkmark$
MMS362P	241	6	-	-	-	10.79 x 3.27 x 3.15	3 ft.	-
MMS370	1080	7	-	-	-	12.76 x 4.25 x 1.77	6 ft.	~
MMS370T	1440	7	-	$\checkmark$	-	12.76 x 4.25 x 1.77	6 ft.	~
			Rotatin	g Outlet Se	ries			
MMS780R	2160	8	6	-	-	14.02 x 3.54 x 2.28	7 ft.	~
MMS760RCT	2160	6	6	$\checkmark$	$\checkmark$	6.26 x 4.25 x 2.52	-	✓
MMS7100RT	2880	10	5	$\checkmark$	-	12.52 x 4.41 x 1.89	7 ft.	~
MMS7120RCT	4320	12	8	$\checkmark$	$\checkmark$	11.89 x 6.02 x 2.17	9 ft.	$\checkmark$
			Slin	nline Series	;			
MMS130RC	1080	3	1	-	$\checkmark$	8.1 x 5.0 x 3.375	-	$\checkmark$
MMS660S	540	6	-	-	-	9.1 x 5.95 x 1.07	-	$\checkmark$
MMS664S	1080	6	-	-	-	16.0 x 5 x 1.5	4 ft.	$\checkmark$
MMS686SCT	3420	8	-	$\checkmark$	$\checkmark$	16.85 x 7.0 x 1.5	6 ft.	$\checkmark$



**MMS110** 



MMS130C



MMS760RCT









MMS362P

MMS370

MMS780R MMS7100RT

MMS686SCT

MMS664S

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These products can expose you to chemicals, including lead compounds or nickel, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65warnings.ca.gov/product