

PRODUCT

CATALOG

**When power is mission-critical,
Minuteman stands ready.**

Minuteman Power Technologies
by Para Systems, Inc.
1455 LeMay Drive
Carrollton, TX 75007

WHY MINUTEMAN

THE MINUTEMAN PROMISE

Peace of mind when power failure is not an option. We are backed by forty years of excellence and the industry's best warranty and support.

About Us

For almost 40 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 several specified markets: Government, Education, Point-of-Sale/ Hospitality, Small to Medium-sized Businesses, Gaming, 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.



Our Mission:

Minuteman exists to provide power to people when they need it most.

Our Vision:

In a world where "power protection products" have become commoditized, the time has come for a leader to emerge. We want our clients to know Minuteman STANDS READY to protect & power mission-critical devices and is the clear choice for our excellent balance between value and reliability.

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Benefits of Power Protection

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 an internet connection is available.

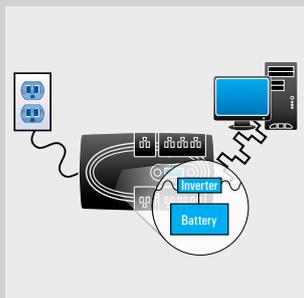
Power Distribution Units (PDUs) allow safe and organized means of delivering power to each device requiring it.

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

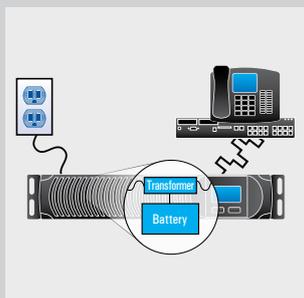
UPS Types



Standby

(Good)

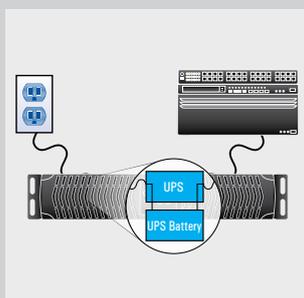
- Cost-Effective Small-load Protection
Protects equipment by reverting to battery during power problems
- Workstation and Peripheral Protection
For individual devices, including PCs, network peripherals, security devices, and more
- Compact Form Factor
Small size perfect for cramped installations
- Power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



Line-Interactive / AVR

(Better)

- 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 network data centers, remote IDF/MDF network closets, security systems, and education networks



On-line / Double-Conversion

(Best)

- 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
Most commonly used for sensitive electronic equipment and critical servers, network devices, and telecommunication systems.



<https://minutemanups.com/uninterruptible-power-supply/>

UPS Sizing and Selection



What factors determine the proper UPS?

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 specification sheets make it the go-to resource for both experts and newcomers in the power field.

Equipment Databases

Build your solutions using our extensive database of equipment load ratings

Configuration Options

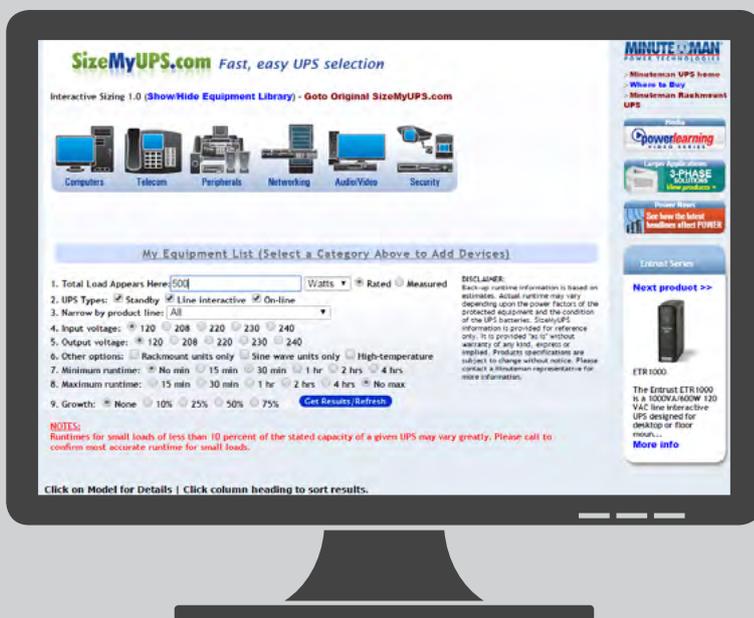
Narrow your choices to your exact needs with the straightforward configuration interface

Comprehensive Solutions

Browse a complete list of solutions that meet your needs with estimated runtime and MSRP

Email and Print Spec Sheets

Send your solutions to interested parties with a single click



Considerations to help determine your UPS needs

- 1 What type of equipment is being backed up?
- 2 What are the power requirements?
- 3 Where is the unit being installed?
- 4 How much backup time is required?
- 5 What are the input and output wiring configurations?
- 6 Monitoring & Management of UPS
- 7 Is there a back-up generator?



Take the Guesswork out of UPS Selection

With our simple-to-use sizing tool at your fingertips, Minuteman has made it easier than ever to find the right UPS for your specific system, eliminating excess cost and any confusion.
SizeMyUPS.com

Endeavor LCD 5-10kVA Series

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

The Minuteman® Endeavor™ 5-10kVA Series UPS combines transient-free, pure sine wave output, extended runtime, generator compatibility, and redundant or parallel configurations 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.

KEY PRODUCT LINE FEATURES

- Double Conversion
- Generator-friendly
- True Sine Wave Output
- Extended Runtime Capable
- Emergency Power-Off Port (EPO)
- SNMP Option Slot
- 3-yr Non-Prorated Warranty
- 120 / 208 / 240V Applications



Endeavor 5/6kVA External Battery Pack (BP192RT XL)



Endeavor 5/6kVA Step Down Transformer



Endeavor 8/10kVA External Battery Pack (BP240RTXL)



Endeavor 8/10kVA Step Down Transformer



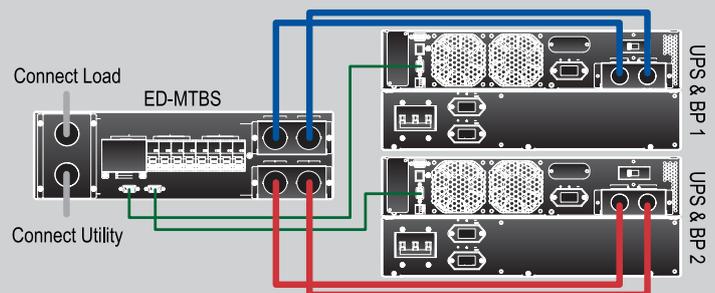
Endeavor 5-10kVA Maintenance Bypass Switch

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



Endeavor 5/6kVA Control Unit (2U rack height)



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

Endeavor LCD 5-10kVA UPS

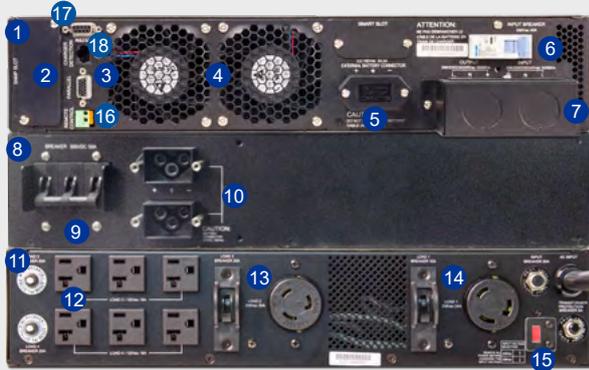
Standard features include:

- Digital Signal Processor Design
- Higher Power Factor (0.9pf)
- 120VAC / 208VAC w/ Standard Receptacles
- 240V Input / Output Optional*
- Parallel 2 Units - Up to 20kVA Capacity
- User-Friendly LCD Display
- 5 and 6kVA Include 10Ft. L6-30P Power Cord
- Automatic Internal Bypass
- Independent Battery Bypass
- Smart Fan Control
- Cold Start Function
- Simultaneous Communication Options
- SNMP Compatible
- RoHS 2 compliant

*Additional charge for 240V configuration

Specifications Complete spec table at minutemanups.com/endeavorlcd
Add "NC" to model numbers for pre-installed SNMP-NV6 card

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	192VDC		240VDC	
Runtime (half/full)	12 / 4	11 / 3	14 / 5	12 / 4
Voltage Range	156 - 280VAC		180 - 280VAC	
Input Plug Type	Hardwire / L6-30P/power cord included (Hardwire / L6-30P/power cord included)		Hardwire Only (Hardwire Only)	
Receptacles	Hardwire Only (6 - 5-15/20R, 1 - L6-20R, 1-L6-30R)		Hardwire Only (8 - 5-15/20R, 1 - L6-20R, 1 - L6-30R)	
Communications Ports	SNMP Option Slot / RS232			
Dimensions L x W x H (in / mm)	26 x 17.3 x 7 / 660 x 440 x 177.5 (26.2 x 17.3 x 10.5 / 660 x 440 x 265.5)		24.6 x 17.3 x 10.3 / 625 x 440 x 261.2 (25.9 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 (Conforms to UL1778 4th Edition & CSA 22.2 no. 107.3-05), RoHS 2, CE, FCC Class B			



- 1 UPS Control Unit
- 2 SNMP Option Slot
- 3 Parallel Connections
- 4 Cooling Fans
- 5 External Battery Connection
- 6 Input Circuit Breaker
- 7 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)
- 16 EPO
- 17 RS232
- 18 External Battery Pack Charger Detetion

Endeavor 6 and 10kVA Tower UPS

Extended Runtime Capable Tower

Endeavor™ 6/10kVA Tower Series UPS combines transient free pure sine wave output and extended runtime capability 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.



Specifications

Complete table at minutemanups.com/endeavor610

Model No.	ED6KTF	ED10KTF
VA/Watts	6000/6000	10000/10000
Output Voltage (VAC)		
Runtime (half/full)	4 / 12	3 / 9
Input & Output Type	Hardwire Terminal Block (L-N-G)	
SNMP Manageable	NetAgent-SNMP-ED	
Dimensions L x W x H (in / mm)	22.1" x 9.8" x 32.5" (561.1 x 250 x 826.5)	
Weight (lbs / kg)	237.0 (107.5)	274.5 (124.5)
Extended Runtime	BP240TWR	

Endeavor LCD 1-3kVA Series

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

KEY PRODUCT LINE FEATURES

- Double-Conversion
- Generator-friendly
- True Sine Wave Output
- Extended Runtime Capable
- Emergency Power-Off Port (EPO)
- SNMP Option Slot
- 5-yr Non-Prorated Warranty



Specifications Complete table at minutemanups.com/endeavorlcd

Add "NC" to model numbers for pre-installed SNMP-NV6 card

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 (6-15P)	5-20P (L6-20P)	L5-30P (L6-30P)	
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	17.0 x 19 x 3.5 432 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 B (1K & 1.5K), FCC Class A (2K & 3K), CE certified, Energy Star certified, RoHS2 (EU Directive 2011/65/EU)			

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.

Endeavor LCD 1-3kVA UPS

Standard features include:

- 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
- Hot-swappable battery replacement
- Cold-start capable
- Temperature-compensated charging
- Compatible with Minuteman's SentryHD® software
- Dedicated EPO port
- RJ11/45 Network / Phone / Fax protection
- Green UPS design (RoHS2 and Energy Star compliant)
- SNMP Compatible
- \$200,000 Platinum Protection Plan® (US and Canada)



- 1 - Unit status indicators
- 2 - Load & battery meters
- 3 - Power status, runtime
- 4 - Scroll, mute, & power controls



- | | | |
|-------------------------|---------------------------|--------------------------------|
| 1 10 ft. Power Cord | 5 Load Bank 2 | 9 RS-232 Communications |
| 2 Input Circuit Breaker | 6 Load Bank 3 (always on) | 10 USB Communications |
| 3 Cooling Fan | 7 Phone/Network Surge | 11 External Battery Connection |
| 4 Load Bank 1 | 8 Remote EPO Port | 12 SNMP Option Slot |

ENCOMPASS 1-3kVA Series

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

KEY PRODUCT LINE FEATURES

- Double-Conversion
- Generator-friendly
- Tool-less Battery Access
- True Sine Wave Output
- Emergency Power Off Port (EPO)
- Hot-Swappable Batteries
- 3-yr Non-Prorated Warranty
- SNMP Option Slot (with optional card)



Specifications Complete table at minutemanups.com/encompass

Add "NC" to model numbers for pre-installed SNMP-NV6 card

Model No.	EC1000RT2U EC1000LCD	EC1500RT2U EC1500LCD	EC2000RT2U EC2000LCD	EC3000RT2U EC3000LCD
VA/Watts	1000/900	1500/1350	2000/1800	3000/2700
Battery Module No.	BM0069 BM0076	BM0070 BM0077	BM0070 BM0077	BM0071 BM0078
Runtime (min) Half/Full load	10 / 2	15 / 5	10 / 3	10 / 3
UPS Receptacles	(6) 5-15R (6) 5-15R		(6) 5-15/20R (8) 5-15/20R	(6) 5-15/20R / (1) L5-30R (8) 5-15/20R / (1) L5-30R
Input Plug	5-15P		5-20P	L5-30P
Cord Length (ft)			10-ft. Power Cord 6-ft. Power Cord	
Communications Ports	USB, RS232 (SNMP Option Slot)			
Approvals	cULus (UL1778 5th Edition & CSA 22.2 no. 107.3-14 /R: 2014) FCC Class A, CE certified, RoHS2 (EU Directive 2015/863/EU)			

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

Encompass 1-3kVA UPS

Standard features include:

- Easy-to-read LCD display
- 0.9 output power factor
- Highly-efficient, economy mode option
- Output receptacle control
- Independent Battery Bypass
- Tool-less battery replacement
- Hot-swappable battery replacement
- Cold start capable
- Automatic internal bypass
- Simultaneous USB, RS232 and SNMP communications
- Compatible with Minuteman's SentryHD software
- Dedicated EPO port
- Site wiring fault indicator
- Full three-year warranty (including batteries)
- \$150,000 Platinum Protection Plan® (US and Canada)



- 1 - ON / Alarm Silent Button
- 2 - The Utility Power
- 3 - The Load Bank 1
- 4 - The Load Bank 2
- 5 - The Bypass Active
- 6 - Weak/Bad Battery
- 7 - Power Off
- 8 - Save UPS settings Changes
- 9 - Page Up / Change UPS settings.
- 10 - Page Down/Next Page
- 11 - Function + Page Up will initiate a 10-second battery test

***Now TAA Compliant.**



Specifications Cont.

Add "NC" to model numbers for pre-installed SNMP-NV6 card

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	19.2" x 18.9" x 3.5" 487 x 479 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	17.4" x 6.8" x 11.4" 440 x 171 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 (For LCD models only)			
BP Part Number	BP24XL	BP48XL	BP72XL

PRO-RT2U Series

Line-Interactive AVR Rack / Tower

KEY PRODUCT LINE FEATURES

- Simulated Sine Wave
- Automatic Voltage Regulation
- Independent Battery Bypass
- LCD Status Display
- SentryHD Download
- 3-yr Non-Prorated Warranty
- SNMP Option Slot
- Load shedding



Specifications

Complete 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			(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 Ports	USB, SNMP Option Slot			
Dimensions LxWxH (in / mm)	16.1 x 18.9 x 3.4 inches (409 x 480 x 86 mm)			20.1 x 18.9 x 3.4 inches (510 x 480 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 including 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)			

The PRO-RT2U Series is a value-priced, yet feature-rich UPS incorporating line-interactive technology which preserves battery power by providing voltage regulation during voltage sags and surges. The PRO-RT2U Series is a great option for entry level network protection used to support servers, telecom or VoIP systems, security systems, plus many other applications.

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

PRO-RT2U UPS

Standard features include:

- Easy to Read LCD Display
- Flexibility in Installation
Rack / tower configurable; wallmount kit optional
- Minuteman SentryHD
Free download
- USB Communications
- SNMP Compatible
- Network / Fax / Phone/ Coax Protection
- Hot-Swappable Batteries
- Load Shedding
- All Metal Case
- Tool-less Battery Access
- Full three-year warranty
(including batteries)
- \$150,000 Platinum Protection Plan® (US and Canada)



- 1 - Unit Status Indicator
- 2 - Load and Battery Meters
- 3 - Numeric Display
- 4 - Display Scroll Button
- 5 - Alarm Silence Button
- 6 - On / Off / Test Button



- | | | |
|-------------------------|---|--|
| 1 Input Circuit Breaker | 5 Fan | 9 Always On Receptacles (2) |
| 2 Input Power Cord | 6 USB Port | (Only one L5-20R on PRO2000RT2U) |
| 3 Coax Surge Protection | 7 RJ11/RJ45/Fax/Modem Network Protection | 10 Option Card Slot |
| 4 Emergency Power Off | 8 Controllable Output Receptacles (3) (Load Bank 1) | 11 Controllable Output Receptacles (3) (Load Bank 2) |

EXR Series

Line-Interactive Uninterruptible Power Supply

KEY PRODUCT LINE FEATURES

- 0.9 power factor
- Alphanumeric LCD Dot Matrix
- Load shedding Enhanced
- Tool-less Battery Access
- True Sine Wave Output
- Independent Battery Bypass
- SNMP Option Slot
- 3-yr Non-Prorated Warranty



Specifications

Complete table at minutemanups.com/exr

Model No.	EXR750RT2U	EXR1000RT2U	EXR1500RT2U (EXR1500RTHV)	EXR2000RT2U	EXR3000RT2U (EXR3000RTHV)
VA/Watts	750/675	1000/900	1500/1350	2000/1800	3000/2700
Battery Module No.	BM0086	BM0086	BM0087	BM088	BM0089
Runtime (min) Half/Full load	7 / 19	4 / 13	2.5 / 9	4.5 / 13	2.5 / 10
UPS Receptacles (120V)	(8) 5-15R	(8) 5-15R	(8) 5-15R	(8) 5-20R (1) L5-20R	(6) 5-20R (1) L5-30R
UPS Receptacles (208V)	-	-	(6) 5-15R	-	(6) 6-15/20R (1) L6-30R
Input Plug	5-15P	5-15P	5-15P (6-15P)	5-20P	L5-30P (L6-30P)
Cord Length (ft)	10-ft.	10-ft.	10-ft.	10-ft.	10-ft.
Communications Ports	USB, RS232, Option card slot				
Approvals	cULus (UL1778 5th Edition & CSA 22.2 no. 107.3-14 / R: 2014), FCC Class B, CE & NOM certified, EnergyStar 2.0, RoHS2 (EU Directive 2011/65/EU & 2015/863/EU)				

The EXR Series offers users a robust and advanced line interactive UPS offering. New features include a higher power factor for improved UPS efficiency, auto-recognition of external battery packs for a smarter extended run-time solutions, tool-less battery connection and replacement, and so much more!

EXR Series 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 electrical output ensures the best power for sensitive electronic equipment.

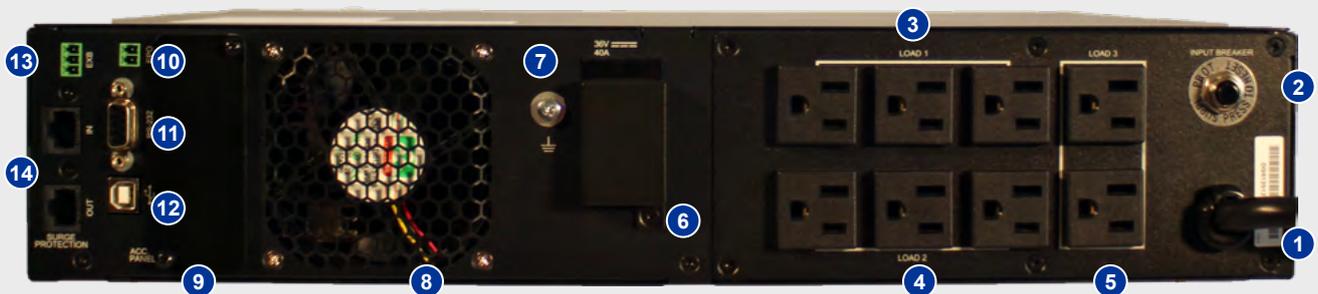
EXR UPS

Standard features include:

- UPS configuration options via front panel
- Auto-recognition of external battery packs
- Unlimited runtime capability with external battery packs
- Flexible installation
Rack / tower configurable; wallmount kit optional
- Simultaneous USB, RS232, and SNMP communications
- Minuteman® SentryHD™
- Dedicated remote Emergency Power Off (EPO) port
- 208V models available
(1500 & 3000VA models)
- cULus certification
NOM certification (Mexico)
- RoHS 2 compliant
- Energy Star 2.0 certification
- Full three-year warranty
(including batteries)
- \$150,000 Platinum Protection Plan® (US and Canada)



- 1 - UPS Status Icon
- 2 - Alphanumeric Dot-Matrix LCD Display
- 3 - Menu Control Buttons
- 4 - Display Scroll Button
- 5 - On / Off / Test Button



- | | | |
|----------------------------------|-----------------------------------|------------------------------------|
| 1 Input power cord | 6 External battery pack connector | 11 RS232 comm. Port |
| 2 Input circuit breaker | 7 External ground stud | 12 USB comm. Port |
| 3 Output receptacles (Load 1) | 8 Cooling fan | 13 Ext battery pack communication |
| 4 Output receptacles (Load 2) | 9 SNMP option slot | 14 1Gbit Ethernet surge protection |
| 5 Output receptacles (Always On) | 10 REPO port | |

Entrust LCD Series UPS

550-1500VA Line-Interactive AVR Tower

KEY PRODUCT LINE FEATURES

- Compact Form Factor
- Tool-less Battery Access
- Easy to Read LCD Display
- Total Control of Your Power
- Hot-Swappable Batteries
- Independent Battery Bypass
- USB Communications



Specifications Complete table at minutemanups.com/entrustlcd

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	5-15P			
Cord Length (ft)	6			
Communications Port	USB			
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

The 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.

Empire Series UPS

350-900VA Standby Low-Profile UPS

KEY PRODUCT LINE FEATURES

ALL Empire Models:

- Versatile Connection Options
8 (350 and 550) or 10 (750 and 900) outlets
- Compact, Wall-Mountable Case
- USB Communications (HID Compliant)
not included in the 350 model
- Tool-less Battery Access
- Independent Battery Bypass
- 3-yr (2-yr battery) Non-Prorated Warranty

Features on 750 and 900VA LCD Models:

- Easy to Read LCD Display
- Green Mode
- Coax Protection



Specifications Complete table at minutemanups.com/empire

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	5-15P			
Cord Length (ft)	4		6	
LCD Display	No	No	Yes	Yes
Communications Ports	USB (except 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

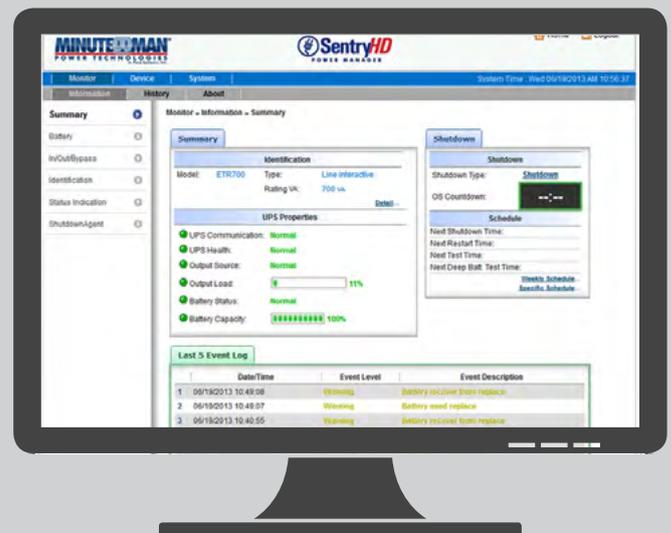
The Minuteman Empire Series UPS is a low-cost, high performance UPS ideally suited for desktop PCs, small network devices, security system components, and much more. Empire provides complete power protection in a compact, wall-mountable package suitable for installation in even the tightest spaces and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

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 utility or UPS issues, all from secure connections on the network. SentryHD allows administrators to eliminate wasteful service calls around the facility, saving significant time and money.



Features [Learn more at minutemanups.com/sentryhd](http://minutemanups.com/sentryhd)

- **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 Server 2003, 2008, 2012, 2016, 2019 (32-bit / 64-bit)
- Unix and Linux

SNMP Monitoring Accessories

Monitor and Manage Power via Network Access

KEY PRODUCT LINE FEATURES

- **Connect the UPS Directly to a Network**
Utilizes a standard RJ45 Ethernet connection
- **Network UPS Management**
Monitor and manage the UPS over web browser
- **Integrate UPS into Network Management System (NMS)**
- **Schedule Events**
Shutdown or restart connected equipment using the integrated scheduler
- **Track Utility Problems via Event Logs**
History of power events on the UPS
- **Multiple Server Shutdown**
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



Specifications Complete table at minutemanups.com/snmp

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

Accessories Add monitoring devices for total installation awareness

Add an ENV-PROBE to your SNMP card for a complete monitoring solution. **Temperature and Humidity Monitoring** Measures the ambient environmental conditions where the UPS is installed and receive warnings of any abnormalities. Optional contact closures for smoke, fire, water, and intrusion are also 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

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 an industry standard NMS and/or web browser, users can monitor the UPS status, issue commands, and configure 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.

Remote Power Management (RPM)

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

KEY PRODUCT LINE FEATURES

- 3-Year Warranty
- Ultimate Power Control
- Secure Management
- Schedule Around Your Needs
- Auto Ping Function
- Multiple Account Capability
- Choose Alert Status Features
- Powerful Logging

8, 16 and 24-Port Models also Feature:

- Enterprise Management Utility
Manage multiple RPM units from a single consolidated interface



Specifications Complete table at minutemanups.com/rpm

Model No.	RPM1521E	RPM1581EV6	RPM30241EV6	RPM30242EV6	RPM1581HVN	RPM20161VN	RPM2082HVI	RPM20162VI
Input and Output Voltage	120	120	120	208	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		6-20P
Cord Length (ft)	6		10		10			10
Output Receptacles (Qty - Type)	2 - 5-15R	8 - 5-15/20R	24-5-15/20R	3-IEC320 C19 21-IEC320 C13	8 - 5-15/20R	16 - 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 + 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	✓	✓	✓	✓	✓	✓	✓	✓
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 Certified		IEC 62368-1, CE Certified		cETLus, CE Certified	

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
- Optional Temperature Probe
- 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
optional rack-mounting kit (BRKT RM RPM1521)



RPM1521E

8, 16 and 24-Port Remote Power Manager

Standard features include:

- Access from Anywhere
Allows rebooting from any internet-enabled device via a secure connection
- Conserve Energy and Prevent Lockups
Allows scheduling of tasks
- Secure Management
Password-protected security levels
- No Special Apps or Installs
Configure and control RPM units worldwide through most standard web browsers using a single network IP address
- Versatile Installations
10-ft power cord and rack-mount hardware for a wide range of installations
- 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
- Optional Temperature & Humidity Probe
Available for all EV6 models
- SNMP and DNS Support

RPM1581HVN 8-port Remote Power Manager (front)

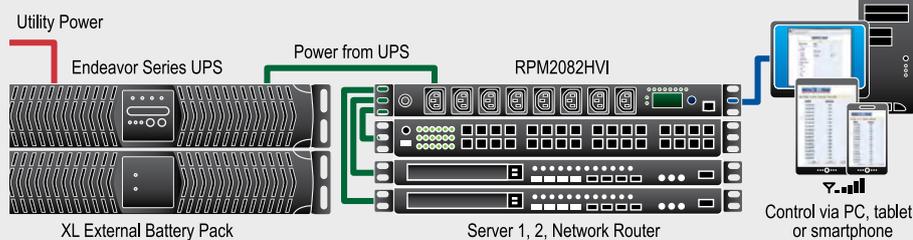


RPM2082HVI 8-port 208V Remote Power Manager (front)



RPM20161VN and RPM20162VI 16-Port Remote Power Manager

Example RPM System Integration



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.

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.

OEPD Power Distribution Units (PDUs)

6-24 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/120 and 208v, in both vertical and horizontal orientations with select models featuring surge suppression. OEPD power cords are strain-relieved with molded plugs using heavy-gauged cables and hard wired options on select models. All models have an external ground stud.



Models Complete spec at minutemanups.com/oepd

Model	Outlet Type	Qty (f/r)	Mounting Format	Locking	Surge
Generic PDU w/o Minuteman Label: 120VAC Input/Output					
OEPD615HV	NEMA 5-15R	6 / 0	1U Horiz. / 0U Vert.	-	-
OEPD815HV	NEMA 5-15R	2 / 6	1U Horiz. / 0U Vert.	-	-
OEPD1415HV	NEMA 5-15R	6 / 8	1U Horiz. / 0U Vert.	-	-
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.	-	-
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.	✓	-
Generic Surge-protected PDU w/o Minuteman Label: 120VAC Input/Output					
OES1015HV	NEMA 5-15R	2 / 8	1U Horiz. / 0U Vert.	-	✓
OES1020HV	NEMA 5-15/20R	2 / 8	1U Horiz. / 0U Vert.	-	✓
Generic PDU w/o Minuteman Label: 208VAC Input/Output					
OEPD1220C13HVL1 ¹	IEC320 C13	12 / 0	1U Horiz. / 0U Vert.	✓	-

Features

- Longer Power Cords**
 Most PDU units have 15-ft power cords, eliminating the need for 6-, 8-, or 10-ft alternatives
- More Standard Outlets**
 6, 8, 10, 12, 14, 18, or 24 outlets. Most have additional front outlets for improved access.
- Configuration Versatility**
 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.
- High Standards**
 PDUs are listed with higher 62368-1 safety 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).

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.



Models Complete spec table at minutemanups.com/mms

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	-	✓
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	-	✓	-	12.76 x 4.25 x 1.77	6 ft.	✓
Rotating Outlet Series								
MMS780R	2160	8	6	-	-	14.02 x 3.54 x 2.28	7 ft.	✓
MMS760RCT	2160	6	6	✓	✓	6.26 x 4.25 x 2.52	-	✓
MMS7100RT	2880	10	5	✓	-	12.52 x 4.41 x 1.89	7 ft.	✓
Slimline Series								
MMS660S	540	6	-	-	-	9.1 x 5.95 x 1.07	-	✓
MMS664S	1080	6	-	-	-	16.0 x 5 x 1.5	4 ft.	✓

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)



MMS110



MMS760RCT



MMS660S



MMS362P



MMS370T



MMS780R



MMS7100RT



MMS664S

Minuteman Standard & Extended Warranty Plans

Uninterruptible Power Supplies (UPS)

Minuteman 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. Includes freight for all service issues.

Standard Extended or Premier? Two Plans to Fit Your Needs

Standard Extended Warranty Plan Highlights

- Provides a full 5-year product warranty coverage
- Includes replacement of defective batteries for the entire warranty term at no additional charge (not pro-rated)
- Provides total warranty coverage on UPS for most business lease terms and/or depreciation terms
- If returned, Minuteman will properly recycle the old batteries

Premier Zero-Ownership Cost Extended Warranty Plan Highlights

- Includes all the benefits listed in the Standard Extended Warranty, plus...
- Minuteman will cover all ground freight charges to repair/replace defective products and include packaging and return shipping of old batteries so that they can be properly recycled.
- Even if batteries are operating normally throughout the warranty period, Minuteman will contact the customer after four-years to offer guaranteed battery replacement.
- 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.



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

	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

For more information on eligible Minuteman products, please visit minutemanups.com/warranty

Power Terminology

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

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

Connection through POWER

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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

Certain products are not available for sale in Washington, Colorado, and Vermont. Please see product page at minutemanups.com for more details.