

EN400 - 400VA/200W | EN750 - 750VA/400W
EN600 - 600VA/300W | EN900 - 900VA/500W



EnSpire EN600 - 600VA/300W
Standby UPS



EnSpire EN900 - 900VA/500W
Standby UPS



The Minuteman® EnSpire™ Series UPS is a low-cost high performance UPS line that provides the features needed to protect your valuable equipment.

The EN400 and EN600 units each have six outlets, three provide battery support along with spike and surge protection and three with spike and surge protection only. The EN750 and EN900 have four each of the outlets described above for total protection of up to eight connected devices. In addition, all units have outlets which are specifically spaced to support transformer blocks.

The EnSpire UPS has a small footprint and is uniquely designed with outlets on the top for placement on or under a desk or table and all models can be wall mounted.

For over 25 years, Para Systems, Inc. has provided quality power products and excellent personalized service with direct human response to all service and support calls. EnSpire products pass extensive quality testing before being shipped to our end users.

Applications

- Small capacity equipment loads
- Desktop/laptop workstations
- Small phone systems
- VoIP handsets
- Home entertainment/theater systems
- Security systems (cameras, DVRs, access control devices)
- Low-power network devices

EnSpire Features

- **Minuteman SentryPlus Software** – SentryPlus auto-shutdown and monitoring software is included with every unit. No special downloads or coupons are required.
- **USB Communications** – EnSpire UPS USB connections are automatically recognized by Microsoft Windows® software. No special USB drivers are required. The EnSpire Series automatically recognizes USB connections with its HID-compliant USB communications.
- **Telephone/Fax/Modem Line Protection** - The EnSpire UPS provides a low-cost means of protecting telephone/fax/modem lines.
- **RoHS Compliant** – All EnSpire products are manufactured using non-hazardous* materials making them safer for the environment.
- **Warranty** - The UPS is covered by a three-year parts and labor warranty and \$50,000 Minuteman Platinum Protection Plan® (U.S.A. and Canada only). The battery is covered by a two-year warranty.

Additional features on EN750/EN900 models:

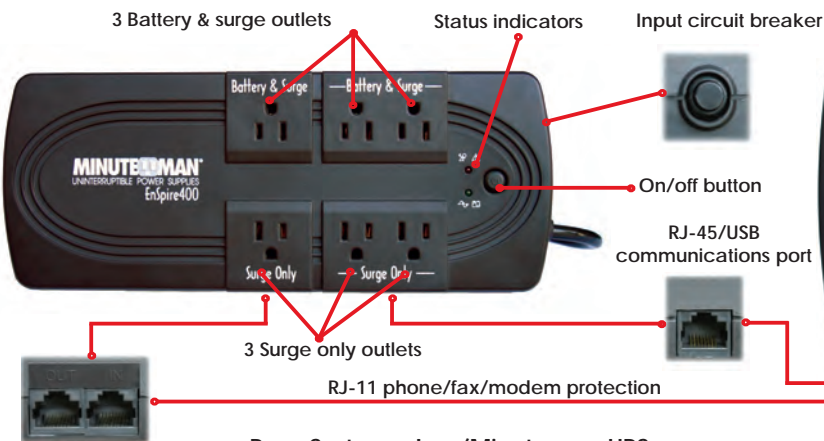
- **Coax Cable Protection** - Surge and spike protection for a coax cable line.
- **Backlit LCD Display** - LCD display that shows UPS information including *estimated runtime*, *battery status* and more.

* Excludes batteries

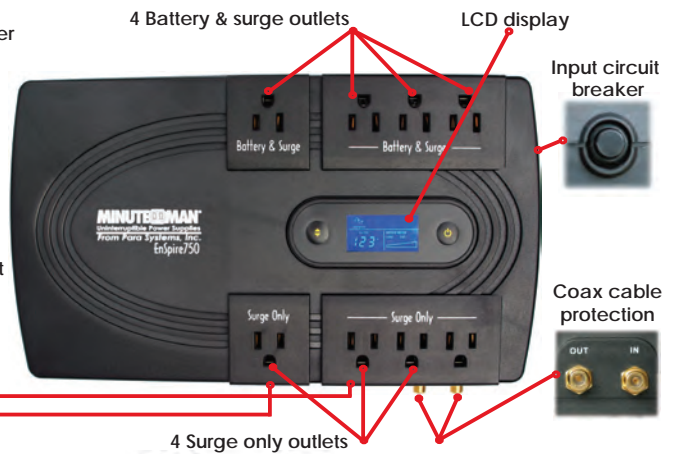
Minuteman® EnSpire™ Series Standby UPS Specifications

System Specifications				
Model Number	EN400	EN600	EN750	EN900
Maximum Power Capacity	400VA / 200W	600VA / 300W	750VA / 400W	900VA / 500W
Topology	Standby UPS			
Input				
Nominal Frequency	50 or 60Hz, ±5Hz, autosensing			
Voltage Range	100 - 140VAC			
Low Voltage Transfer Point	96V (± 3%) resets to utility power at 101V (± 3%) or higher			
High Voltage Transfer Point	146V (± 3%) resets to utility power at 140V (± 3%) or lower			
Surge Energy Rating	320 J			
Input Protection	Resettable circuit breaker			
Output Non-Battery Operation				
Voltage Range	120VAC: 100 - 140VAC			
Frequency Range	60Hz: 55 - 65Hz or 50Hz: 45 - 55Hz			
Output Battery Operation				
Waveform Type	Simulated sine wave			
Nominal Voltage	120VAC			
Voltage Regulation	Nominal ±5% (until Low Battery Warning)		Nominal +2%/-9% (until Low Battery Warning)	
Frequency	50/60Hz, ±0.5Hz (unless synchronized to utility)			
Transfer Time	6-8 ms Typical			
Overload Capacity	105% for 10-seconds, 115% Shutdown Immediately		105% for 10-seconds, 120% Shutdown Immediately	
Protection	Over-Current, Short-Circuit Protected and Latching Shutdown			
Physical				
Size - Net L x W x H	11.97 x 4.84 x 3.35 in (304 x 123 x 85 mm)		12.40 x 7.20 x 3.30 in (314 x 183 x 83 mm)	
Weight - Net	6.44 lb (2.92 kg)	7.05 lb (3.20 kg)	9.40 lb (4.30 kg)	9.70 lb (4.40 kg)
Size - Shipping L x W x H	15.00 x 8.20 x 5.43 in (380 x 208 x 138 mm)		14.40 x 10.20 x 5.60 in (367 x 260 x 143 mm)	
Weight - Shipping	7.30 lb (3.30 kg)	8.00 lb (3.60 kg)	10.60 lb (4.80 kg)	11.02 lb (5.00 kg)
Regulatory Compliance				
Safety Approvals, EMC	UL1778, cUL (CSA 22.2 no. 107.1), FCC Class B		cTUVus (Conforms to UL1778, CSA 22.2 standards), FCC Class B	

ENSPIRE EN400/EN600 TOP VIEW



ENSPIRE EN750/EN900 TOP VIEW



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www.minutemanups.com • www.sizemyups.com • www.sizemypdu.com • www.comparemyups.com



Conforms to UL STD. 1778



Ensfire Series

350-900VA Standby, Wall-Mountable UPS

The Minuteman Ensfire Series UPS is a low-cost, high performance UPS line that provides the features needed to protect your valuable equipment. The EN350 and EN550 units each have eight outlets, four provide battery support along with spike and surge protection and four with spike and surge protection only.

The EN750LCD and EN900LCD each have five of the outlets described above for total protection of up to ten connected devices. In addition, all units have outlets which are specifically spaced to support transformer blocks.



Specs, video, & more at minutemanups.com/ensfire

Key Product Line Features



LCD Status Display
For 750 and 900 models



SentryHD Software Compatible
Monitor & manage (except 350 model)



Wall-Mountable
Units feature wall-mount holes



3-yr Electronics Warranty
2-yr non-prorated battery

Applications



Communications
Workstations, Small Phone Systems



Security
Midsize DVR, Acc Ctrl, Intrusion



IT/Network
Switches, Hubs, Access Points

Capacity:

Sm Med Lrg

Trouble-free Setup & Monitoring LCD Display & Easy-access Battery

LCD Control Panel (for 750VA and 900VA models)

Monitor your power with Ensfire LCD's control panel.

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



Tool-less Battery Panel

Setup and maintenance are a breeze with Ensfire LCD's tool-less battery panel and large, easy-grip battery connector. Simply slide the panel out to access the battery for initial connection or battery maintenance.



Key Features

- Economical Standby Protection Hardware**
Cost-effective surge and backup protection for small loads
- Versatile Connection Options**
8 (350 and 550) or 10 (750 and 900) outlets to ensure a connection for all of your devices
- Compact, Wall-Mountable Case**
- Tool-less, Hot-Swappable Battery Replacement**
- USB Communications (HID Compliant)**
Ensfire UPS USB connections are automatically recognized by Microsoft Windows (550/750/900 models)
- Single Line Phone / Fax / Modem Protection**
The Ensfire UPS provides a low cost means of protecting telephone/fax/modem lines
- Independent Battery Bypass**
Provides surge and spike protection, even when batteries are weak or dead

Features on 750VA and 900VA 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**
Protect coaxial cable for AV equipment from damaging spikes and surges
- Industry Leading Product Protection**
Standard 3-year parts and labor warranty with 2-year non-prorated battery coverage; \$50,000 Platinum Protection Plan (US and Canada)
- ECO Mode on EN900LCD**



- | | |
|---|--------------------|
| 1 Battery and Surge Receptacles (4 / 5) | 5 Coax Surge |
| 2 Surge-only Receptacles (4 / 5) | 6 Input Power Cord |
| 3 Network/Phone Surge Protection | 7 Input Breaker |
| 4 USB Comm. Port (550/750/900) | |



Enspire Series Specifications & Features

EN350 / EN550 / EN750LCD / EN900LCD

	Model Number	EN350	EN550	EN750LCD	EN900LCD
General	Apparent Output Power	350VA	550VA	750VA	900VA
	Active Output Power	200 Watts	300 Watts	450 Watts	500 Watts
	Power Factor	0.571	0.545	0.6	0.556
	Topology	Standby UPS			
	Type	Low-Profile Office Format			
	Agency Approvals	cTUVus (conforms to UL1778 5th Edition, CSA 22.2 no 107.314 / R: 2014), CE, FCC Class B, U.S. DOE Energy Star			
	Green Compliance	RoHS 2 Directive 2011/65/EU			
	Warranty	3-years Electronics / 2-years Batteries			
	Equipment Protection Policy	Up to \$50k (Continental U.S. and Canada only)			
	Battery/Surge-Protected Outlets	(4) NEMA 5-15R		(5) NEMA 5-15R	
Surge-only Protected Outlets	(4) NEMA 5-15R		(5) NEMA 5-15R		
Input	Voltage Range	95VAC to 140VAC			
	Frequency Range	60Hz ±6Hz			
	Typical Transfer Time	6 ms (max 10ms)			
	Surge Protection	>500 joules			
Output	Voltage Default	95VAC to 140VAC			
	Frequency	60Hz ±6Hz			
	Efficiency (AC-AC)	>95% at full-rated load (complies with Energy Star)			
On-Battery	Voltage	120VAC			
	Voltage Regulation	120VAC ±5% until low battery warning			
	Frequency	60Hz ±0.5Hz unless synchronized to line			
	Wave Form	Simulated sine wave			
	Communications Port	USB (550/750/900 models only)			
	Audible Alarms	On Battery, Low Battery, Internal Fault, Overload, Weak/Bad/Disconnected Battery			
Battery System	Full-Load Runtime (non-linear)	3 min.	3 min.	3 min.	3 min.
	Half-Load Runtime (non-linear)	12 min.	11 min.	11 min.	11 min.
	Hot Swappable Batteries	Yes			
	Internal Battery	Yes			
	Battery Type	Sealed, non-spillable, maintenance-free, valve regulated lead acid			
Physical	Net Dimensions: D x W x H	12.4" x 5.1" x 3.7" (316 x 130 x 94 mm)		12.6" x 7.2" x 3.6" (320 x 183 x 92 mm)	
	Net Weight: lbs. (Kgs.)	6.2 (2.81)	6.4 (2.90)	7.7 (3.49)	8.4 (3.81)
	Shipping Dimensions: D x W x H	14.7" x 5.6" x 8.3" (373.4 x 142.2 x 210.8 mm)		15.0" x 5.6" x 10.4" (381.0 x 142.2 x 264.2 mm)	
	Shipping Weight: lbs. (Kgs.)	7 (3.18)		9 (4.08)	

Feature-rich Design

- Compact case design
- LCD front panel display (EN750LCD, EN900LCD)
- USB communications (except EN350)
- Hot-swappable batteries
- Easy battery access
- RJ11/45 Network/Phone/Fax protection
- 3-year limited warranty (electronics) 2-year warranty (batteries)
- RoHS 2 compliant
- Energy Star certified
- Transformer-friendly receptacles
- DC startup capability
- Independent battery bypass
- Built-in self-diagnostics testing
- Audio & visual alarms
- ECO Mode (EN900LCD)

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
- Not supported by EN350

LCD Display Provides Real-Time Information (750/900 models)

- UPS status and condition
- Battery capacity bar graph
- Estimated runtime AC and DC modes
- Load capacity bar graph
- Warning / Fault icons

Complete Protection for:

- Desktop computers
- Standalone servers
- Network switches, hubs, and peripherals
- VoIP communications
- Telephone systems
- External computer accessories
- Security cameras and DVRs



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Minuteman Value for Non-Critical Equipment

Minuteman Power Technologies' line of MMS Series Surge Suppressors offer the value and features customers demand, and provide the opportunity to build a complete protection system with a single trusted name.

Three product lines are available, each offering protection from spikes and surges along with unique features that solve problems such as transformer blocks, wall-mounting, and child safety.

Standard Series

- 1 & 3 outlet wall taps, 6 & 7 outlet strips
- Child safety covers on MMS370 & MMS370T
- Up to 1440J of surge protection
- Coax, network/phone line protection on select models
- Up to \$75,000 connected equipment protection
- Limited Lifetime Warranty (2-year on MMS362P)



MMS110 & MMS130C

MMS362P 'Twin Pack'

MMS370 & MMS370T

MMS570

Model Number Feature Codes

- | | | |
|---|---------------------------|--------------------------|
| C Coax Protection | R Rotating Outlets | S Slimline Design |
| T Telephone/Fax/Network Protection | | |

Rotating Outlet Series

Minuteman 'R' models feature 90° or 180° rotating outlets which accommodate multiple transformer blocks, making wasted outlets a thing of the past. Select models also feature cord management provisions, allowing for organized clutter-free installation.

- 6 outlet wall tap, 8, 10, or 12 outlet strips
- Rotating outlets allow multiple transformer blocks to be connected without covering multiple spaces
- Up to 4320J of surge protection
- Coax, network/phone line protection on select models
- Cord management feature on select models
- Up to \$200,000 connected equipment protection
- Limited Lifetime Warranty



MMS760RCT

MMS780R

MMS7100RT

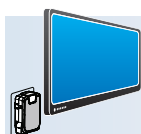
MMS7120RCT

Rotating Outlets

NEW MMS Slimline Series

Minuteman's newest surge suppressor line, the 'S' slimline series provides maximum protection in a sleek, attractive package. These units are designed to fit into tight spaces, and are the perfect solution for cramped media centers, desks, and wall-mounted TVs.

- 3 & 6 outlet wall taps, 6 & 8 outlet strips
- Rotating outlet/Rotating Coax on MMS130RC
- Up to 3420J of surge protection
- Coax, network/phone line protection on select models
- Up to \$200,000 connected equipment protection
- Limited Lifetime Warranty



Perfect protection for wall-mounted TVs!
Learn more about the slimline series at
<http://www.minutemanups.com/slimline>



MMS686SCT

MMS664S

MMS660S

Minuteman® MMS Series Surge Suppressors

MMS Model Number	MMS110	MMS130C	MMS362P	MMS370	MMS370T	MMS570	MMS760RCT
Electrical rating	15A, 120V, 1800 Watts	15A, 120V, 1800 Watts	15A, 120V, 1800 Watts	15A, 120V, 1800 Watts	15A, 120V, 1800 Watts	15A, 120V, 1800 Watts	15A, 120V, 1800 Watts
Joule rating	540J	1080J	241J	1080J	1440J	1440J	2160J
Outlet quantity	1	3	6	7	7	7	6
Rotating outlets	-	-	-	-	-	-	6
Receptacle covers	-	-	-	Yes	Yes	-	-
Surge protection mode	L-N, L-G, N-G	L-N, L-G, N-G	L-N	L-N, L-G, N-G	L-N, L-G, N-G	L-N, L-G, N-G	L-N, L-G, N-G
UL clamping voltage	500V	400V	800V	400V	400V	400V	330V, 400V, 400V
Maximum peak current	36,000A	72,000A	12,000A	72,000A/96,000A	72,000A/96,000A	84,000A	144,000A
Max spike voltage	6KV	6KV	6KV	6KV	6KV	6KV	6KV
EMI/RFI Frequency	150KHz-100MHz	150KHz-100MHz	-	150KHz-100MHz	150KHz-100MHz	150KHz-100MHz	150KHz-100MHz
noise filter Attenuation	Up to 40dB	Up to 40dB	-	Up to 40dB	Up to 40dB	Up to 40dB	Up to 40dB
Telephone Jack type	-	-	-	-	RJ11/6P2C (1in/1out)	-	RJ11/6P2C (1 in / 2 out)
Fax Energy	-	-	-	-	160J	-	160J
Modem Line protection	-	-	-	-	1 Line	-	1 Line
Surge arrestor	-	Gas Tube	-	-	-	-	Gas Tube
DSS/Coax Breakdown volts	-	< 75V	-	-	-	-	< 75V
protection Insertion loss	-	< 0.1dB	-	-	-	-	< 0.1dB
Line protection	-	1 Line	-	-	-	-	1 Line
Power cord length	-	-	3 ft.	6 ft.	6 ft.	9 ft.	-
Surge protected indicator	Yes	Yes	-	Yes	Yes	Yes	Yes
Ground OK indicator	Yes	Yes	-	Yes	Yes	Yes	Yes
Surge circuit shutdown	Yes	Yes	-	Yes	Yes	Yes	Yes
Power safety shutdown (L-N)	Yes	Yes	-	Yes	Yes	Yes	Yes
Cord management	-	-	-	-	-	Yes	-
Accessories	-	Coax Cable x 1	-	-	Tel Cable x 1	-	Tel Cable x 1 + Coax Cable x 1
Safety approvals	UL1449, UL1363, cUL	UL1449, UL1363, cUL	UL1449, UL1363, cUL	UL1449, UL1363, cUL	UL1449, UL1363, cUL	UL1449, UL1363, cUL	UL1449, UL1363, cUL
Warranty	Limited Lifetime	Limited Lifetime	Two-year Limited	Limited Lifetime	Limited Lifetime	Limited Lifetime	Limited Lifetime

MMS Model Number	MMS780R	MMS7100RT	MMS7120RCT	MMS130RC	MMS660S	MMS664S	MMS686SCT
Electrical rating	15A, 120V, 1800 Watts	15A, 120V, 1800 Watts	15A, 120V, 1800 Watts	15A, 120V, 1800 Watts	15A, 120V, 1800 Watts	15A, 120V, 1800 Watts	15A, 120V, 1800 Watts
Joule rating	2160J	2880J	4320J	1080J	540J	1080J	3420J
Outlet quantity	8	10	12	3	6	6	8
Rotating outlets	6	5	8	1	-	-	-
Surge protection mode	L-N, L-G, N-G	L-N, L-G, N-G	L-N, L-G, N-G	L-N, L-G, N-G	L-N, L-G, N-G	L-N, L-G, N-G	L-N, L-G, N-G
UL clamping voltage	330V, 400V, 400V	330V, 400V, 400V	330V, 400V, 400V	400V	500V	400V	400V
Maximum peak current	144,000A	180,000A	252,000A	72,000A	36,000A	72,000A	20,400A
Max spike voltage	6KV	6KV	6KV	6KV	6KV	6KV	6KV
EMI/RFI Frequency	150KHz-100MHz	150KHz-100MHz	150KHz-100MHz	150KHz-100MHz	150KHz-100MHz	150KHz-100MHz	150KHz-100MHz
noise filter Attenuation	Up to 40dB	Up to 58dB	Up to 58dB	Up to 70dB	Up to 40dB	Up to 40dB	Up to 58dB
Telephone Jack type	-	RJ11/6P2C (1 in/1 out)	RJ11/6P2C (1 out)	-	-	-	RJ11/45 (1 in/1 out)
Fax Energy	-	160J	160J	-	-	-	160J
Modem Line protection	-	1 Line	1 Line	-	-	-	1 Line
Network Jack type	-	-	RJ45 8P8C/(1in/2out)combo	-	-	-	-
line Protection port	-	-	1, 2, 3, 6	-	-	-	-
protection Communication speed	-	-	10/ 100 Base-T (Cat 5)	-	-	-	-
Surge arrestor	-	-	Gas Tube	Gas Tube	-	-	Gas Tube
DSS/Coax Breakdown volts	-	-	< 75V	< 75V	-	-	< 75V
protection Insertion loss	-	-	< 0.1dB	< 0.1dB	-	-	< 0.1dB
Line protection	-	-	1 Line	1 Line	-	-	1 Line
Power cord length	7 ft.	7 ft.	9 ft.	-	-	4 ft.	6 ft.
Surge protected indicator	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ground OK indicator	Yes	Yes	Yes	-	-	-	Yes
Surge circuit shutdown	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power safety shutdown (L-N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cord management	Yes	Yes	Yes	-	-	-	-
Accessories	-	Tel Cable x 1	Tel cable x 1 + Coax cable x 1 + Cat 5 cable x 1	-	-	-	-
Safety approvals	UL1449, UL1363, cUL	UL1449, UL1363, cUL	UL1449, UL1363, cUL	UL1449, UL1363, UL452, UL1492, cUL	UL1449, UL1363, cUL	UL1449, UL1363, cUL	UL1449, UL1363, UL497A, UL452, UL1492, cUL
Warranty	Limited Lifetime	Limited Lifetime	Limited Lifetime	Limited Lifetime	Limited Lifetime	Limited Lifetime	Limited Lifetime



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