

Industry-leading Functionality

The Minuteman SV Series features a field-proven Digital Signal Processor (DSP) achieving high reliability, while providing protection from electrical power disturbances to its connected loads. Industry-leading functionality is standard and includes hot swappable batteries, a powerful internal charger, emergency shut-down controls and programmable receptacles.



High-end Features - Budget Friendly Price

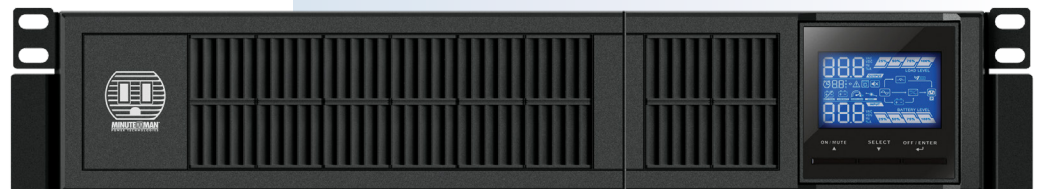
- True Double Conversion Online UPS
- Unity Output Power Factor
- Tower/Rack Mount Convertible Design
- Compact and Lightweight
- Advanced Digital Control Technology
- Wide Input Voltage and Frequency Ranges
- LCD/LED Mimic Screen Personalization
- Programmable Power Management Outlets
- Eco and Advanced Eco Mode for Energy Saving
- Emergency Power Off Function (EPO)
- Communications Capability
- Intelligent Self-Diagnostics
- High-Efficiency and Protection
- Advanced Battery Management

Optional Features

- Variety of Customer Options Slot
- Manual Maintenance Bypass

Ideally Suited to Protect:

- Education/Research Laboratories
- Processing Manufacturing (Food/Beverage, Pharmaceutical, Plastics, Packaging)
- Water and Waste Water Treatment
- Hospitals/Medical
- Retail
- Broadcast
- Robotics
- Printing
- Paper Production
- Network Equipment
- Servers



Minuteman® SV Series Online UPS Specifications

Model (SV)		1000RT230	1500RT230	2000RT230	3000RT230
Capacity VA/ Watts		1000 VA	1500 VA	2000 VA	3000 VA
		1000 W	1500 W	2000 W	3000 W
INPUT					
Voltage Range	Rated Volts	220-240 VAC			
	Low Line Transfer	160 VAC/140 VAC/120 VAC/110 VAC ± 5 % (based on load percentage 100%-80% / 80%-70% / 70%-60% / 60%-0)			
	Low Line Comeback	175 VAC/155 VAC/135 VAC/125 VAC ± 5 %			
	High Line Transfer	300 VAC ± 5 %			
	High Line Comeback	290 VAC ± 5 %			
Frequency Range		40 Hz ~ 70 Hz			
Power Factor		≥0.99 @nominal voltage			
THDi		≤ 5% @ 205-245VAC			
		THDU < 1.6% @ input and full linear load condition			
OUTPUT					
Output Voltage		200/208/220/230/240 VAC			
AC Voltage Regulation		± 1% (Batt Mode)			
Frequency Range		47 ~ 53 Hz or 57 ~ 63 Hz (Synchronized Range)			
Frequency Range		50Hz ± 0.1% Hz or 60Hz ± 0.1%Hz (Bat. Mode)			
Current Crest Ratio (CF)		3:1 (max.)			
Harmonic Distortion (THDU)		<2% (Linear load)			
		<4% (Non-Linear load)			
Transfer Time		Zero			
Waveform (Battery Mode)		Pure Sinewave			
EFFICIENCY					
AC Mode		≥89%		≥91%	
Battery Mode		≥88%		≥90%	
ECO Mode		≥96%			
BATTERY					
Battery Type		(2) 12V/9Ah	(3) 12V/9Ah	(4) 12V/9Ah	(6) 12V/9Ah
Typical Recharge Time		3 hours recover to 95% capacity (for Non-XL models only)			
Charging Current (max.)		2A (default)			2A (default)
Charging Voltage		27.4 VDC ± 1%	41.1 VDC ± 1%	54.7 VDC ± 1%	82.1VDC ± 1%
LCD DISPLAY					
Status		Load level, Battery Level, Alarms, Operating Mode			
Readings		Input Voltage and Frequency, Output Voltage and Frequency, Battery Backup Time (hours/minutes)			
Control/Select Buttons		(3) buttons to turn UPS On/Off, navigate LCD screen & Mute Alarms			
AUDIBLE & VISUAL ALARMS					
Warning Indicators		Low battery, Overload, Battery Not Connected, Overcharge, Site Wiring Fault, EPO Enabled, Over Temperature, Charger Failure, Battery Fault, Bypass Out of Range and Bypass Frequency Unstable			
**PHYSICAL WEIGHT & DIMENSIONS H" x W" x D" / [mm]					
Rack Mount		3.46" x 17.24" x 16.14" (2U) [88 x 438 x 410]	3.46" x 17.24" x 16.14" (2U) [88 x 438 x 410]	3.46" x 17.24" x 20.08" (2U) [88 x 438 x 510]	3.46" x 17.24" x 24.80" (2U) [88 x 438 x 630]
Tower		17.24" x 3.46" x 16.14" (2U) [438.0 x 87.9 x 410.0]	17.24" x 3.46" x 16.14" (2U) [438.0 x 87.9 x 410.0]	17.24" x 3.46" x 20.08" (2U) [438.0 x 87.9 x 510.0]	17.24" x 3.46" x 24.80" (2U) [438.0 x 87.9 x 629.9]
Net Weight lbs. / (kg)		26 / (12)	34 / (15)	43 / (20)	61 / (28)
ENVIRONMENT (Electronics)					
Operating		32°F (0°C) to 104°F (40°C)			
Humidity		20-90 % RH @ 0 - 40° C (non-condensing) (32°F - 104°F			
Storage		-13°F (-25°C) to 104°F (40°C) BATTERIES (REFRESH Charge @ 3 months)			
Noise Level		Less than 50dBA @ 1 Meter			
MANAGEMENT / COMMUNICATION					
Smart RS-232/USB		Supports Windows 2000/2003/XP/Vista/2008/7/8/10, Linux, Unix, and MAC			
Optional SNMP/ MODBUS		Power management from SNMP manager and web browser			
Optional AS400 Card		With DB9 or 9 Pin Connector			
AGENCY					
Listing		CE; EN 62040-2:2006 (C2); EN 62040-1:2008			

* Derate capacity to 80% when the output voltage is adjusted to 200VAC/208VAC.