

Industrial-Grade UPS System

Heavy-duty power protection for harsh industrial environments



Cisco
Compatible

Cisco Systems | Technology
Developer
Partner

Model #: SM1000RMX

- ▶ Heavy-duty, industrial-grade metal housings
- ▶ Shock and vibration rated to MIL-STD-810D
- ▶ 19 inch rackmount
- ▶ 6 AC outlets provide battery backup and surge protection
- ▶ 2 serial ports (DB9 and USB) works with free software (Web download) to facilitate unattended shutdown

DESCRIPTION

Tripp Lite's SM1000RMX line interactive, rackmount UPS system in a ruggedized, industrial-grade steel cabinet protects sensitive electronics from blackouts, voltage fluctuations and transient surges. Shock, vibration, humidity and splash resistant design is built to withstand the harshest user environments, meeting MIL-STD-810 specifications. Built-in isolation transformer with Faraday shield offers a superior level of safety and output power quality with common-mode noise filtering to further reduce the possibility of data errors and equipment damage. Occupies only 3 rack spaces (3U) in any 2 or 4 post 19 inch rackmount application with a maximum depth of only 10.75 inches. 1000VA / 750 watt maximum output power offers 13 minutes runtime at full load and 33 minutes at half load during power failures. Line interactive voltage regulation corrects brownouts as low as 79v and overvoltages as high as 147v to fully regulated 120v nominal output for smooth continuous operation of connected equipment. Includes 6 NEMA 5-15R output receptacles and twist-lock NEMA L5-15P input plug connection at the end of a 10 foot line cord. Includes slot for internal SNMP/web card, plus one DB9 and one USB enhanced monitoring port for unattended shutdown, remote control and monitoring of UPS system and power data. Back panel nut and bolt lug provides adequate chassis grounding reference for connected equipment. Line sensitivity adjustment allows user calibration for compatibility with alternate waveform power from generators and alternate AC input sources. Internal cooling fan runs as needed to maintain optimal internal operating temperature. Compatible with Tripp Lite's PowerAlert monitoring software. 2 year warranty.

KEY BUYING POINTS

- Shock, vibration, humidity and splash resistant design meets MIL-STD-810 specifications
- Ruggedized industrial-grade steel cabinet with humidity resistant, coated circuit boards
- Built-in isolation transformer with faraday shield offers enhanced common mode noise protection
- 1000VA / 750 watt output capacity accommodates a variety of sensitive electronic loads
- Occupies only 3 rack spaces (3U) in any standard 2-4 post 19 inch rackmount application with a maximum depth of 10.75 inches
- Compatible with North American 120V / 60 Hz power as found in the USA, Canada and Mexico
- Offers 13 minutes runtime with a full load of 1000VA and 33 minutes with a half load of 500VA
- Line interactive voltage regulation corrects severe brownouts and overvoltages from 79 to 147v back to normal 120v levels without using battery power
- 6 NEMA 5-15R output receptacles, twist-lock NEMA L5-15P input plug connection, 10 foot line cord
- Notification of system status via 5 front-panel LEDs and multi-function audible alarms
- PowerAlert Software, available via free download from www.tripplite.com, provides e-mail or pager notification of power problems and the simultaneous automatic unattended shutdown of multiple servers
- Built-in DB9 and USB enhanced communication ports offer remote monitoring and unattended shutdown of connected network and standalone PC applications
- Communication port supports on battery, low battery, power restored, AC line voltage, DC battery voltage, load percentage, battery charge current, battery capacity, internal UPS temperature and line frequency status messaging. Interface supports timed inverter shutoff after unattended shutdown and activate self-test Slot for SNMP/web card (part#: SNMPWEBCARD) and environmental sensor (part#: ENVIROSENSE) for remote communications in large IP environments
- User replaceable batteries allow on-site battery replacement without removing the UPS from the rack installation
- Built-in cooling fan
- Back panel nut and bolt lug offers optional chassis grounding for connected equipment
- Line power sensitivity adjustment enables compatibility with generator power
- UPS battery set ships fully assembled and ready for use, no time consuming, connection of individual internal batteries by user is

necessary

- UL (USA), cUL (Canada), FCC Class A (Business) listed, meets MIL-STD-810
- 2 year manufacturers product warranty

TYPICAL APPLICATIONS

- Ideal for protection of sensitive electronics in any application calling for a ruggedized, splash and vibration resistant UPS system meeting MIL-STD-810 in a 19 inch rackmount form factor.

OPTIONS & ACCESSORIES

- SNMP accessories: [SNMPWEBCARD](#), [ENVIROSENSE](#)
- Dataline protectors: [DNET1](#), [DTEL2](#), [DCATV](#)
- Circuit Tester: [CT120](#)
- Rack enclosures: [SR45UB](#), [SRNET45UB](#), [SRX24UB](#)
- Extended warranties: 3 Year [WEXT3-500-1500](#), 5 Year [WEXT5-500-1500](#)

PACKAGE INCLUDES

- SM1000RMX UPS System, PowerAlert Software and cabling, Mounting hardware, Warranty information, Instruction manual

COMPLETE SPECIFICATIONS

SYSTEM OVERVIEW

System overview:

Line interactive UPS in 19 inch rackmount format requiring only 3 rack spaces (3U). Includes industrial-grade steel cabinet, splash resistant controls and indicators, humidity resistant coated circuit boards, full line isolation via built-in isolation transformer with Faraday shield, shock vibration resistant housing meeting MIL-STD-810, external grounding lug, PowerAlert monitoring software, USB and DB9 monitoring ports with complete cabling and slot for SNMP/web card for detailed remote UPS and power status monitoring.

Voltage compatibility:

120 VAC

Frequency compatibility:

60 Hz

OUTPUT

Output volt amp capacity (VA):

1000

Output watt capacity (watts):

750

Output nominal voltage:

120V

Output voltage regulation:

LINE MODE: Sine wave line voltage 120V (-15% / +11%) BATTERY MODE: PWM sine wave output 120V +/-5%

Output frequency regulation:

LINE MODE: Passes line frequency of 60Hz +/-10% BATTERY MODE: Inverter output regulated to 60Hz +/-0.5Hz

Outlet quantity / type:

6 NEMA 5-15R

Customized load management receptacles:

3 individually controllable pairs of outlets support automated load shedding and remote reboot on demand of locked network devices. Configurable via PowerAlert software to automatically switch off optional loads, like monitors, to increase available runtime for servers and other critical devices.

Overload protection:

Resettable circuit breaker

INPUT

Maximum input amps:

9.2A / 860 watts

Input connection type:	NEMA L5-15P
Input cord length:	10 ft., 14 gauge
Recommended electrical service:	15A 120V

BATTERY

Full load runtime:	13 minutes (1000VA)
Half load runtime:	33 minutes (500 watts)
DC system voltage:	48 VDC
Typical battery lifespan:	3-6 years, depending on usage
Battery recharge rate:	2-4 hours to 90%

VOLTAGE REGULATION

Voltage regulation description:	Automatic Voltage Regulation (AVR) circuits maintain clean, regulated computer-grade 120V nominal output, without using battery power, during brownouts to 79V and overvoltages to 147V
Overvoltage correction:	Input voltages between 128 and 147VAC are reduced by 12%
Direct pass through:	Input voltages between 105 and 127VAC are passed on to connected equipment unchanged
Brownout correction:	Input voltages between 95 and 104VAC are boosted by 12%
Severe brownout correction:	Input voltages between 79 and 94VAC are boosted by 24%

LEDS ALARMS & SWITCHES

Front panel LEDs:	Yes, 5 front-panel indicator LEDs confirm line power, battery power, voltage regulation, load level and battery low / replace status
Alarms:	4 function audible alarm indicates power failure conditions (4 short beeps every 10 seconds), overload (continuous short beeps) and low battery (continuous tone)
Switches:	Yes, includes 2 front panel mounted push-button switches for system enable, self-test and alarm cancel functions - all controls and indicators are splash resistant

SURGE / NOISE SUPPRESSION

AC surge suppression:	Conforms to IEEE 587 / ANSI C62.41 specifications
AC suppression response time:	Instantaneous
EMI / RFI AC noise suppression:	Yes

PHYSICAL

Shipping weight (lbs):	55
Shipping weight (kg):	25.0
Unit weight (lbs):	51
Unit weight (kg):	23.2
Unit Dimensions (HWD/in):	5.15 x 17.25 x 10.75
Unit Dimensions (HWD/cm):	13.1 x 43.8 x 27.3
Material of construction:	Steel
Form factors supported:	3U rackmount
Cooling method:	Built-in cooling fan
Battery Access:	Battery access door allows user battery replacement without uninstalling UPS from rack enclosure

ENVIRONMENTAL

Operating Temperature:	+32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius
Storage Temperature:	+5 to +122 degrees Fahrenheit / -15 to +50 degrees Celsius
Relative Humidity:	0 to 95%, non-condensing

COMMUNICATIONS

Network monitoring port:	Includes 2 built-in monitoring ports, 1-USB & 1-DB9. Communications ports support on battery, low battery, power restored, AC line voltage, DC battery voltage, load percentage, battery charge current, battery capacity, internal UPS temperature, line frequency status messaging. Interface supports timed inverter shutoff after unattended shutdown, activate self-test and 10 second reboot of connected equipment. Supports individual reboot of selected items connected to load management receptacles and load shedding to increase battery runtime for the most critical loads.
Software and cabling included:	Includes PowerAlert UPS monitoring software for all common network and standalone operating systems. Ships with 2 cables, 1-USB & 1-DB9.
SNMP compatibility:	Built-in accessory slot accommodates internal SNMP / Web card and other network accessories

LINE / BATTERY TRANSFER

Transfer time from line power to battery mode:	2-4 milliseconds
Low voltage transfer to battery power:	79V (resets to line power as voltage increases to 83V)
High voltage transfer to battery power:	147V (resets to line power as voltage decreases to 144V)

CERTIFICATIONS

Certifications:	UL1778 (USA), cUL (Canada), FCC Class A (emissions), MIL-STD-810 (shock, vibration)
-----------------	---

WARRANTY

Optional coverage:	3-5 year warranties, plus next day and on-site warranty coverage available for select opportunities. Contact Tripp Lite for additional information.
Product warranty:	2 year product warranty

SPECIAL FEATURES

EPO port:	Includes RJ11 EPO (emergency power off) port and interconnection cable
TVSS grounding:	Includes back panel grounding point with thumbscrew for data line surge suppressors and other network accessories requiring a safe grounding point.
Appearance:	Attractive zinc plated steel 3U rackmount housing

*The policy of Tripp Lite is one of continuous improvement.
Specifications are subject to change without notice.
Therefore, your product may vary slightly from what is currently listed.*



Tripp Lite World Headquarters
1111 W. 35th Street
Chicago, IL 60609 USA

Customer Support
(773) 869-1234

© 2005 Tripp Lite. All Rights Reserved.