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# Model #: SMART1000RM1U

# SmartPro Rackmount UPS - Line interactive, sine wave UPS with integrated switched PDU and current monitoring



## **Highlights**

1000VA / 1kVA line interactive 1U rackmount UPS

Maintains sine-wave 120V nominal output over an input range of 83 to 147V Network communications supported via USB port, serial port, SNMP/Web card slot and EPO interface

Current monitoring and switched PDU control via 2 single-outlet load banks Input: NEMA 5-15P (120V 15A) / Output: 6 NEMA 5-15R (120V) 2 year product warranty / \$250,000 Ultimate Lifetime Insurance (USA, Puerto Rico & Canada only)

#### **Description**

1000VA line interactive UPS for server, network and telecommunications equipment/1U rackmount form factor/Corrects brownouts and overvoltages from 83 to 147/Sine wave output in both AC and battery mode/Uninterruptible Power Supply (UPS) maintains battery derived AC output during blackouts and severe voltage fluctuations/NEMA 5-15P input plug/Network-grade AC surge and noise suppression/Network management interfaces includes USB port, DB9 serial port and SNMPWEBCARD slot/Supports simultaneous detailed monitoring of equipment load levels, self-test data and mains power conditions via all 3 network interfaces at once/Includes PowerAlert monitoring software and complete cabling/Emergency Power Off (EPO) interface/Integrated 2 bank switched PDU/3 stage metered current monitoring and battery charge LEDs/Mains power and voltage regulation LEDs/Audible alarm/Self-test/Supports 2 or 4 post rackmount installation/Field replaceable, hot swappable internal batteries/Attractive all-black UPS design/Two year warranty with \$250,000nnected equipment insurance/Extended warranty and service contracts available

## Applications

Ideal for protection of fileservers, network accessories and telecommunications equipment in server rooms, internetworking closets, co-location racks, kiosks and a variety of other locations. Common applications include any mix of servers, workstations, hubs, routers, concentrators, IP telephony and traditional PBX switching systems.

#### Package Includes

SMART 1000RM1U UPS System

Mounting hardware

Cabling for USB & DB9 monitoring and EPO switching

PowerAlert unattended shutdown and UPS/Power monitoring software

Warranty information and instruction manual

#### **Features**

1000VA/640 watt output power capacity compatible with North American 120V/60Hz power

1U rackmount UPS installs in standard 2 or 4 post 19 inch racks with a depth of only 16.75 inches

Protects sensitive networking equipment from blackouts, voltage fluctuations and transient surges

Regulation (AVR) corrects inputs from 83-147VAC back to usable 120V levels without consuming battery power

Line interactive Automatic Voltage Regulation (AVR) corrects inputs from AVR circuits boost undervoltages by 14% depending on the severity

and reduces overvoltages by 12%

Network interfaces support simultaneous communications via USB, DB9 serial and SNMPWEBCARD slot

Included PowerAlert UPS monitoring software supports safe unattended shutdown, monitoring and control via local connected servers, plus any number of additional servers over IP

Communications ports support on-battery, low-battery, power-restored, AC-voltage, DC-voltage, output current monitoring, battery charge current, battery capacity, internal UPS temperature, AC line frequency, timed inverter shutoff, activate self-test and load bank output power control

Built in Emergency Power Off (EPO) interface with cable

Sine wave output in AC and battery modes

Half load runtime of 15 minutes (500VA/320 watts)/Full load runtime of 7 minutes (1000VA/640 watts)

Includes 6 NEMA 5-15R output receptacles arranged in 2 switchable single-outlet load banks

Integrated 2 bank switched PDU enables remote outlet management for load shedding or remote reboot of individual devices

3 stage metered LEDs offer current monitoring and battery charge level

Mains power and voltage regulation LEDs offer at-a-glance power status information

Front panel switches support self-test and alarm cancel functions

UPS ships fully assembled in full compliance with DOT regulations, no time consuming connection of internal batteries by user required UL (USA), cUL (Canada), NOM (Mexico), FCC Class A (Emissions) listed

2 year manufacturer's product warranty, \$250,000 Ultimate Lifetime Insurance

## **Specifications**

SYSTEM OVERVIEW		
Voltage compatibility	120 VAC	
Frequency compatibility	60 Hz	
OUTPUT		
Output VA	1000	
Output watts	640	
Output nominal voltage	120VAC sine wave output in AC and battery mode	
Output voltage regulation	LINE MODE: Sine wave line voltage 120V (-21% +8%), BATTERY MODE: Sine wave output within 5% of 120VAC	
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	"Includes 2 load banks, each with 2 outlets that 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	Via 15A input breaker	
INPUT		
Maximum input amps	9.2A	
Input connection type	NEMA 5-15P	
Input cord length	10 ft., 14 gauge	
Recommended electrical service	15A 120V	
BATTERY	BATTERY	
Full load runtime	7 minutes (640 watts)	
Half load runtime	15 minutes (320 watts)	
DC system voltage	24 VDC	
Typical battery lifespan	3-6 years, depending on usage	

Battery recharge rate	2-4 hours to 90%
Replacement Battery Cartridge	RBC64-1U
VOLTAGE REGULATION	DN
Voltage regulation description	Line interactive voltage regulation system corrects input voltages between 83 and 147 back to usable 120V nominal levels.
Overvoltage correction	Input voltages between 128 and 147 are reduced by 12%
Brownout correction	Input voltages between 83 and 107 are boosted by 14%
LEDS ALARMS & SWI	TCHES
Front panel LEDs	5 front panel LEDs - Green POWER LED, 3 color BATTERY CHARGE LED, 3 color OUTPUT LOAD LEVEL LED, red BATTERY WARNING LED.
Alarms	3 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
SURGE / NOISE SUPP	RESSION
AC surge suppression	480 joules
AC suppression response time	Instantaneous
EMI / RFI AC noise suppression	Yes
PHYSICAL	
Shipping weight (lbs)	36
Shipping weight (kg)	16.3
Shipping Dimensions (HWD/in)	6.25 x 23.5 x 22.5
Shipping Dimensions (HWD/cm)	15.9 x 60 x 57.2
Unit weight (lbs)	32
Unit weight (kg)	14.5
Unit Dimensions (HWD/in)	1.75 x 17.5 x 16.75
Unit Dimensions (HWD/cm)	44.5 x 44.5 x 42.5
Material of construction	Steel
Form factors supported	Rack (1U)
Cooling method	Built-in cooling fan
Battery Access	Battery access door allows hot swap battery replacement without powering connected equipment off
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
Line mode BTU/hr. (Max.)	55.8

Battery mode BTU/hr. (Max.)	189.2	
COMMUNICATIONS		
Network monitoring port	Includes 2 built-in monitoring ports, 1-USB & 1-DB9. Each 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	
Software and cabling included	Includes PowerAlert UPS monitoring software for network and standalone operating systems. Ships with complete USB and DB9 cabling.	
SNMP compatibility	Built-in accessory slot accommodates internal SNMP / Web card and other network accessories	
WatchDog compatibility	Yes, compatible with Tripp Lite's Watchdog system service to restore operation to locked equipment through soft reboot of application / OS or hard power off/on reboot of connected equipment - ideal for unattended kiosk applications	
LINE / BATTERY TRANSFER		
Transfer time from line power to battery mode	2-4 milliseconds	
Low voltage transfer to battery power	83V (resets to line power as line voltage increases to 87V or higher)	
High voltage transfer to battery power	147V (resets to line power as line voltage decreases to 143V or lower)	
CERTIFICATIONS		
Certifications	Tested to UL1778 (USA), cUL (Canada), Class A (emissions), NOM (Mexico)	
WARRANTY		
Product warranty	2 year product warranty	
Connected equipment insurance (USA and Canada Only	\$250,000 connected equipment insurance (USA / Canada only)	
Optional coverage	3 year, 5 year, next day and on-site warranty coverage available for select opportunities	
SPECIAL FEATURES		
EPO port	Includes RJ11 EPO (emergency power off) port and cable	
TVSS grounding	Includes back panel grounding point with thumbscrew for data line surge suppressors and other network accessories requiring a safe grounding point	
Cold Start	Yes, inverter can be "cold started" to enable temporary AC output during a power failure	
Appearance	Attractive black color scheme	

More information, including related products, owner's manuals, and additional technical specifications, can be found online at www.tripplite.com/products/model.cfm?txtModelID=3054.

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