

# Smart Pro Rack/Tower UPS

Intelligent, line-interactive network power management system



## Model #: SMART1000RM2U

- ▶ 1000VA line interactive 2U rack/tower UPS system with sine wave output in AC and battery mode
- ▶ 6 outlets arranged in 2 switchable load banks
- ▶ Simultaneous communications via SNMPWEBCARD slot, USB and DB9 serial ports
- ▶ Included PowerAlert UPS monitoring software manages an unlimited number of network UPS systems
- ▶ Corrects brownouts and overvoltages from 83 to 147V
- ▶ \$250,000 Ultimate Lifetime Insurance (USA, Puerto Rico & Canada only)

## DESCRIPTION

Tripp Lite's SMART 1000RM2U intelligent, line-interactive sine wave rack/tower uninterruptible power supply prevents data loss, downtime and equipment damage due to power outages, voltage fluctuations and transient surges. Requires only two rack spaces (2U) in a standard rack enclosure. Large internal batteries offer 21 minutes half load runtime and 9 minutes at full load. Maintains regulated 120V nominal output without using battery power during brownouts and overvoltages from 83 to 147V. 1000VA / 700 watt power handling capability and full time sine wave output supports networking, telecom and other sensitive electronic applications. Includes a total of 6 outlets arranged in 2 load banks that are individually controllable via software interface to reboot select equipment on demand or shed less significant loads to extend battery runtime for more critical equipment. Supports simultaneous remote monitoring of UPS and site power conditions via built-in network accessory card slot, USB and DB9 serial monitoring ports. Optional SNMPWEBCARD accessory enables remote monitoring of UPS as a managed device via network management console applications. Communications ports support messaging of detailed UPS operating parameters and line power status. Includes PowerAlert UPS monitoring and unattended shutdown software with management support for an unlimited number of network UPS systems. Built-in accessory slot supports SNMP with optional SNMPWEBCARD adapter. Emergency Power Off (EPO) interface offers option for instantaneous power-off of UPS and connected equipment in the case of fire or emergency. Multi-function audible alarms and set of 5 front panel LEDs offer at-a-glance notification of UPS and line power status. Network-grade AC surge suppression protects equipment from damage and performance problems resulting from transient surges and line noise. Attractive all-black color scheme. Two year warranty with \$250,000 connected equipment insurance (USA & Canada only).

## KEY BUYING POINTS

- SMART 1000RM2U line interactive UPS offers battery derived sine wave AC output during power outages, voltage regulation during brownouts and overvoltages, plus network grade AC surge suppression
- 1000VA / 700 watt power handling capability with full-time sine wave output offers guaranteed compatibility with networking, telecom and other sensitive electronic devices
- Supports 2U rackmount installation in 4 post rack enclosures with included mounting accessories, 2 post rackmount mountable with optional 2POSTRMKITWM accessory, upright tower installation supported with optional 2-9USTAND accessory
- Large internal batteries offer runtimes of 21 minutes at half load (500VA / 350 watts) and 9 minutes at full load (1000VA / 700 watts)
- Maintains regulated 120V nominal output during brownouts and overvoltages from 83 to 147V
- Includes 6 UPS-supported outlets arranged in 2 individually controllable load banks (2 outlets per bank) that can be powered off and back on again via software interface
- PowerAlert UPS monitoring and unattended shutdown software enables configurable network broadcast messaging, email notification, event logging and running user-defined script commands
- Offers simultaneous monitoring by up to 3 directly-connected devices through included USB, DB9 and SNMP\* interfaces (\*requires optional SNMPWEBCARD), or the monitoring of any number of additional UPS systems over IP with included PowerAlert monitoring software.
- Communications ports support messaging of UPS and line power status, including on-battery, low-battery, power restored, AC line voltage, DC battery voltage and remaining battery capacity
- Supports timed inverter shutoff after unattended shutdown, activate self-test and UPS output power control for delayed or immediate reboot of connected devices
- Supports Tripp Lite's WatchDog software application to restore unresponsive programs by systematically restarting applications,

operating systems and ultimately rebooting completely locked computers by momentarily switching UPS power off and back on again (requires optional WATCHDOGSW)

- Built-in accessory slot supports SNMP with optional SNMPWEBCARD adapter
- Emergency Power Off (EPO) interface with cable
- Multi-function audible alarms and set of 5 front panel LEDs
- Network-grade AC surge suppression
- Attractive all-black color scheme
- UPS battery set ships fully assembled and ready for installation, no time consuming connection of internal batteries by user is necessary
- Two year warranty with \$250,000 connected equipment insurance (USA & Canada only)

## TYPICAL APPLICATIONS

- Ideal for rackmount or upright tower protection of file servers, 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.

## OPTIONS & ACCESSORIES

- SNMP accessories: [SNMPWEBCARD](#), [ENVIROSENSE](#)
- USB Hubs-accessories: [U202-004-R](#), [U205-004-R](#), [U022-010](#)
- Dataline protectors: [DNET1](#) [DTEL2](#), [DCATV](#)
- Circuit Tester: [CT120](#)
- Rack enclosures: [Rack Systems](#)
- Power distribution: [PDU1215](#), [PS7224](#)
- Tower Stands: [2-9USTAND](#)
- Two Post Rackmount Kit: [2POSTRMKITWM](#)
- Watchdog software: [WATCHDOGSW](#)
- Extended warranties: 3 Year [WEXT3-500-1500](#), 5 Year [WEXT5-500-1500](#)

## PACKAGE INCLUDES

- SMART 1000RM2U UPS System
- Mounting hardware for 4 post rackmount installation
- Cabling for USB & DB9 monitoring and EPO switching
- PowerAlert unattended shutdown and UPS/Power monitoring software
- Warranty information and instruction manual

## COMPLETE SPECIFICATIONS

### SYSTEM OVERVIEW

#### System overview:

Line-interactive 2U rack / tower UPS protects equipment from blackouts, brownouts, overvoltages, surges and line noise. Maintains sine wave AC output during blackouts and continuously corrects brownouts and overvoltages from 83 to 147 volts. Supports enhanced monitoring of UPS and line power conditions via built-in USB and DB9 serial ports, included PowerAlert monitoring software and complete cabling. Includes slot for SNMPWEBCARD accessory. Built-in pair of load management banks offer remote reboot of selected loads or load shedding to enhance battery runtime for critical loads. Supports 2U rackmount and upright tower form factors with included hardware.

**Voltage compatibility:** 120V AC

**Frequency compatibility:** 60 Hz

### OUTPUT

**Output volt amp capacity (VA):** 1000

<b>Output watt capacity (watts):</b>	700
<b>Output nominal voltage:</b>	120V AC
<b>Output voltage regulation:</b>	LINE MODE: Sine wave line voltage 120V (-21% +8%), BATTERY MODE: Sine wave output within 5% of 120VAC
<b>Output frequency regulation:</b>	LINE MODE: Passes line frequency of 60Hz +/-10% BATTERY MODE: Inverter output regulated to 60Hz +/-0.5Hz
<b>Outlet quantity / type:</b>	6 NEMA 5-15R
<b>Customized load management receptacles:</b>	Includes 2 load banks, each with 2 outlets, that support load shedding and remote reboot on demand of locked network devices. Controllable via PowerAlert software to automatically switch off optional loads, like monitors, to increase available runtime for servers and other critical devices.
<b>Overload protection:</b>	15A input breaker

## INPUT

<b>Maximum input amps:</b>	6.8A / 770 watts
<b>Input connection type:</b>	NEMA 5-15P
<b>Input cord length:</b>	10 ft., 14 gauge
<b>Recommended electrical service:</b>	15A 120V

## BATTERY

<b>Full load runtime:</b>	9 minutes (700 watts)
<b>Half load runtime:</b>	21 minutes (350 watts)
<b>DC system voltage:</b>	24 VDC
<b>Typical battery lifespan:</b>	3-6 years, depending on usage
<b>Battery recharge rate:</b>	2-4 hours to 90%

## VOLTAGE REGULATION

<b>Voltage regulation description:</b>	Line interactive voltage regulation system corrects input voltages between 83 and 147 back to usable 120V nominal levels.
<b>Overvoltage correction:</b>	Input voltages between 128 and 147 are reduced by 12%
<b>Brownout correction:</b>	Input voltages between 83 and 107 are boosted by 14%

## LEDS ALARMS & SWITCHES

<b>Front panel LEDs:</b>	5 front panel LEDs - Green POWER LED, 3 color BATTERY CHARGE LED, 3 color OUTPUT LOAD LEVEL LED, red BATTERY WARNING LED.
<b>Alarms:</b>	3 function audible alarm indicate: power failure conditions—4 short beeps every 10 seconds; overload—continuous short beeps; and low battery—continuous tone
<b>Switches:</b>	Includes 2 front panel mounted push-button switches for system enable, self-test and alarm cancel functions

## SURGE / NOISE SUPPRESSION

<b>AC surge suppression:</b>	480 joules
<b>AC suppression response time:</b>	Instantaneous
<b>EMI / RFI AC noise suppression:</b>	Yes

## PHYSICAL

<b>Shipping weight (lbs):</b>	41.5
<b>Shipping weight (kg):</b>	18.8
<b>Unit weight (lbs):</b>	35
<b>Unit weight (kg):</b>	15.9
<b>Unit Dimensions (HWD/in):</b>	3.5 x 17.5 x 13.5

<b>Unit Dimensions (HWD/cm):</b>	8.9 x 44.5 x 34.3
<b>Shipping Dimensions (HWD/in):</b>	9 x 24 x 20.25
<b>Shipping Dimensions (HWD/cm):</b>	22.9 x 61 x 51.4
<b>Material of construction:</b>	Steel
<b>Form factors supported:</b>	Rack (2U)
<b>Cooling method:</b>	Built-in cooling fan
<b>Battery Access:</b>	Battery access door allows hot swap battery replacement without powering connected equipment off

## ENVIRONMENTAL

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

## COMMUNICATIONS

<b>Network monitoring port:</b>	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 messaging. Interface supports timed inverter shutoff after unattended shutdown, activate self-test and 10 second reboot of connected equipment. Supports reboot of all connected devices at once or individual load banks via software interface. Compatible with Tripp Lite's PowerAlert and WatchDog software.
<b>Software and cabling included:</b>	Includes PowerAlert UPS monitoring software for network and standalone operating systems. Ships with complete USB and DB9 cabling.
<b>SNMP compatibility:</b>	Built-in accessory slot accommodates internal SNMP / Web card and other network accessories
<b>WatchDog compatibility:</b>	Compatible with Tripp Lite's Watchdog Software 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

<b>Transfer time from line power to battery mode:</b>	2-4 milliseconds
<b>Low voltage transfer to battery power:</b>	83V (resets to line power as line voltage increases to 87V or higher)
<b>High voltage transfer to battery power:</b>	147V (resets to line power as line voltage decreases to 143V or lower)

## CERTIFICATIONS

<b>Certifications:</b>	UL1778 (USA), cJUL (Canada), Class B (emissions), NOM (Mexico)
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## WARRANTY

<b>Optional coverage:</b>	3 year, 5 year, next day and on-site warranty coverage available for select opportunities
<b>Product warranty:</b>	2 year product warranty
<b>Connected equipment insurance (USA and Canada Only):</b>	\$250,000 connected equipment insurance (USA / Canada only)

## SPECIAL FEATURES

<b>EPO port:</b>	Includes RJ11 EPO (emergency power off) port and cable
<b>TVSS grounding:</b>	Includes back panel grounding point with thumbscrew for data line surge suppressors and other network accessories requiring a safe grounding point
<b>Cold Start:</b>	Yes, inverter can be "cold started" to enable temporary AC output during a power failure
<b>Appearance:</b>	Attractive all-black color scheme

*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.*



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