Smart Pro Rack/Tower UPS

Intelligent, line interactive network power management system







Model #: SMART500RT1U

- 500VA line interactive 1U rack/tower UPS
- 7 outlets with 1 switchable load bank
- Simultaneous communications via SNMPWEBCARD slot, USB and DB9 serial ports
- Included PowerAlert UPS monitoring software manages an unlimited number of network UPS systems
- Built-in voltage regulation corrects brownouts to 90V
- \$250,000 Ultimate Lifetime Insurance (USA, Puerto Rico & Canada only)

DESCRIPTION

Tripp Lite's SMART500RT1U intelligent, line interactive rack/tower uninterruptible power supply prevents data loss, downtime and equipment damage due to power outages, voltage fluctuations and transient surges. Requires only one rack space (1U) in a 2 or 4 post rack, with included accessories for upright tower placement. Large internal batteries offer 17 minutes half load runtime and 5 minutes at full load. Maintains regulated 120V nominal output without using battery power during brownouts as low as 90V. 500VA / 300 watt power handling capability is compatible with networking, telecom and other sensitive electronic applications. Includes 6 UPS supported outlets with a single outlet load bank that can be individually controlled via software interface to reboot select equipment on demand or shed less significant loads to extend battery runtime for more critical equipment. Includes 1 surge-only outlet for peripherals not requiring battery backup. Supports simultaneous remote monitoring of UPS and site power conditions via built-in USB and DB9 monitoring ports. Includes PowerAlert UPS monitoring and unattended shutdown software with complete cabling. 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 situation. 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 500RT1U line interactive UPS offers battery derived sine wave AC output during power outages, voltage regulation during brownouts, plus network-grade AC surge suppression
- 500VA / 300 watt power handling capability compatibile with networking, telecom and other sensitive electronic devices
- Supports 1U rackmount installation in 2 or 4 post rack enclosures, upright tower placement also supported mounting accessories included
- Large internal batteries offer runtimes of 17 minutes at half load (250VA / 150 watts) and 5 minutes at full load (500VA / 300 watts)
- Maintains regulated 120V nominal output during brownouts as low as 90V
- Includes 6 UPS-supported outlets, with one single outlet load bank that can be powered off and back on again via software interface.
 One additional surge-only outlet powers accessories not requiring battery support
- 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 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.

OPTIONS & ACCESSORIES

SNMP accessories: <u>SNMPWEBCARD</u>, <u>ENVIROSENSE</u>
USB Hubs-accessories: <u>U202-004-R</u>, <u>U205-004-R</u>, <u>U022-010</u>

Dataline protectors: <u>DNET1</u>, <u>DTEL2</u>, <u>DCATV</u>

• Circuit Tester: CT120

Rack enclosures: Rack Systems
 Power Distribution: PDU1215, PS7224
 Watchdog software: WATCHDOGSW

Extended warranties: 3 Year WEXT3-500-1500, 5 Year WEXT5-500-1500

PACKAGE INCLUDES

- SMART 500RT1U 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

COMPLETE SPECIFICATIONS

SYSTEM OVERVIEW

System overview: Line interactive 1U rack / tower UPS with protection from blackouts, brownouts, surges and

line noise. Maintains AC output during blackouts and continuously corrects brownouts as low as 90 volts back to usable levels. 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. Single built-in outlet load management bank offers remote reboot of selected loads via software interface or load shedding to enhance battery runtime for the most critical loads during blackouts. Supports 1U

rackmount and upright tower form factors with included mounting hardware.

Voltage compatibility: 120V AC Frequency compatibility: 60 Hz

OUTPUT

Output volt amp capacity (VA): 500

Output watt capacity (watts): 300

Output nominal voltage: 120V AC

Output voltage regulation: LINE MODE: Sine wave line voltage 120V (-15% +13%), BATTERY MODE: PWM sine wave

output within 10% of 120V

Output frequency regulation: LINE MODE: Passes line frequency of 60Hz +/-10% BATTERY MODE: Inverter output

regulated to 60Hz +/-1Hz

Outlet quantity / type: 7 NEMA 5-15R

Customized load management receptacles: Includes single-outlet load bank that supports load shedding and remote reboot on demand

of locked network devices. Controllable via PowerAlert software to 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: 5.6A

Input connection type: NEMA 5-15P

Input cord length: 10 ft., 14 gauge, Black

Recommended electrical service: 15A 120V

BATTERY

Full load runtime: 5 minutes (500VA)

Half load runtime: 17 minutes (250VA)

DC system voltage: 12 VDC

Typical battery lifespan: 3-6 years, depending on usage

Battery recharge rate: 2-4 hours to 90%

Replacement Battery Cartridge: RBC62-1U

VOLTAGE REGULATION

Voltage regulation description: Line interactive voltage regulation system corrects brownouts as low as 90 volts back to

usable 120V nominal levels

Brownout correction: Input voltages between 90 and 108 are boosted by 14%

LEDS ALARMS & SWITCHES

Front panel LEDs: 5 front panel LEDs - green POWER LED, green AVR LED, 3-color BATTERY CHARGE LED,

3-color OUTPUT LOAD LEVEL LED, red BATTERY WARNING LED.

Alarms: Audible alarm warns of power failure, overload, UPS fault and low battery conditions

Switches: Includes 2 front panel mounted push-button switches for system enable, self-test and alarm

cancel functions

SURGE / NOISE SUPPRESSION

AC surge suppression: 480 joules
AC suppression response time: Instantaneous

EMI / RFI AC noise suppression: Yes

PHYSICAL

Shipping weight (lbs): 19.9

Shipping weight (kg): 9

Unit weight (lbs): 17.6

Unit weight (kg):

Unit Dimensions (HWD/in): 1.75 x 17.5 x 11.75

Unit Dimensions (HWD/cm): 4.45 x 44.5 x 29.8

Shipping Dimensions (HWD/in): 5 x 22.5 x 16

Shipping Dimensions (HWD/cm): 12.7 x 57.2 x 40.6

Material of construction: Steel

Form factors supported: Rack (1U)

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.): 65.1

Battery mode BTU/hr. (Max.): 437.1

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 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.

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: 90V (resets to line power as line voltage increases to 94V or higher)

High voltage transfer to battery power: 136V (resets to line power as line voltage decreases to 132 or lower)

CERTIFICATIONS

Certifications: UL1778 (USA), cUL (Canada), Class B (emissions), NOM (Mexico), RoHS-Compliant

WARRANTY

Optional coverage: 2 year product warranty

Product warranty: \$250,000 connected equipment insurance (USA / Canada only)

Connected equipment insurance (USA and

Canada Only):

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 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.



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

> Customer Support (773) 869-1234

© 2007 Tripp Lite. All Rights Reserved.