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# SmartPro Expandable Rack/Tower UPS System

Intelligent, line-interactive network power management system



## Model #: SMART1500RML2U

- ▶ 1500VA line interactive 2U rack / tower UPS
- ▶ Enhanced communication ports (1 USB / 1 DB9), free PowerAlert software and cabling, slot for SNMP/Web card
- ▶ Corrects brownouts and overvoltages from 79-147V
- ▶ 1 load bank, 8 outlets
- ▶ Expandable runtime
- ▶ \$250,000 Ultimate Lifetime Insurance (USA & Canada only)

## DESCRIPTION

Tripp Lite's SMART1500RML2U intelligent, line interactive rack/tower UPS system 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 30 minutes half load runtime and 12 minutes at full load, expandable with the addition of BP48V24-2U or BP48V60RT3U external battery packs. 1500VA / 940 watt power handling capability supports a variety of networking, telecom and other sensitive electronic applications. Includes a total of 8 outlets, one pair of which are individually controllable via software interface to reboot remote equipment on demand or automatically shed less significant loads to extend battery runtime for more critical equipment. Supports 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. Ships in attractive gray color scheme; includes optional use, user installable, black front bezel to alter UPS appearance to match black equipment racks. Two year warranty with \$250,000 connected equipment insurance (USA & Canada only).

## KEY BUYING POINTS

- SMART1500RML2U line interactive UPS offers voltage regulation, battery support and network-grade AC surge suppression
- Uses only 2 rack spaces (2U) in a 19 inch rack enclosure with an installed depth of only 15 inches
- Includes mounting accessories for 4 post rackmount systems, 2 post rackmount compatible with optional 2POSTRMKIT accessory, tower compatible with optional 2-9USTAND accessory
- 1500VA / 940 watt power handling capability; 30 minutes half load runtime / 12 minutes full load runtime
- Extended runtime available with BP48V24-2U (limit 1) or BP48V60RT3U (multi-pack compatible) external battery packs
- Automatic Voltage Regulation (AVR) circuits maintain usable 120V nominal without using battery power during brownouts as low as 75V and overvoltages as high as 147V
- Includes a total of 8 NEMA5-15R outlets, 1 pair of which can be individually powered on and off via software interface to selectively reboot remote equipment or automatically shed less significant loads to extend battery runtime for more critical equipment
- Supports 120 volt / 60 Hz applications in USA, Canada, Mexico and more; common 15 amp straight blade input plug compatible with standard NEMA 5-15R wall sockets
- Includes 1 USB and 1 DB9 communication ports for remote monitoring of UPS and site power status
- Communications ports support messaging of UPS and line power status, including on-battery, low-battery, power-restored, AC line voltage, DC battery voltage and battery capacity; supports timed inverter shutoff after unattended shutdown, activate self-test and 10 second reboot of connected equipment
- PowerAlert UPS monitoring and unattended shutdown software with complete USB and DB9 cabling included
- Supports SNMP in large network applications with optional SNMPWEBCARD internal adapter
- Supports Tripp Lite's WatchDog software application to automatically restore unresponsive programs by restarting them and rebooting completely locked computers by automatically switching UPS power off and back on again
- 5 front panel LEDs and multi-function audible alarms offer status of line power, battery power, battery low/replace, voltage regulation and load level
- Built-in cooling fan maintains optimal internal UPS temperature
- Hot-swappable / user replaceable batteries allow on-site battery replacement while the UPS is fully installed



- UPS battery set ships fully assembled and ready for installation, no time consuming battery connections required
- Cold start capability enables UPS turn-on in battery mode during blackout conditions
- UL (USA), cUL (Canada), NOM (Mexico), FCC Class A (Business) Listed
- \$250,000 Ultimate Lifetime Insurance (USA and Canada only / 2 year manufacturers product warranty)

## TYPICAL APPLICATIONS

- Ideal for the protection of rackmount file servers, network accessories and telecommunications equipment. Common applications include any mix of servers, workstations, hubs, routers, concentrators, IP telephony and traditional PBX switching systems. Line interactive voltage regulation makes this system ideal for locations where severe brownouts and overvoltages are common.

## OPTIONS & ACCESSORIES

- External battery pack: [BP48V60RT3U](#) or [BP48V24-2U](#)
- SNMP accessories: [SNMPWEBCARD](#), [ENVIROSENSE](#)
- USB Hubs-accessories: [U202-004-R](#), [U205-004-R](#), DUSB, [U022-010](#)
- Dataline protectors: [DNET1](#), [DTEL2](#), [DCATV](#)
- Circuit Tester: [CT120](#)
- Rack enclosures: [SR45U](#), [SR45UB](#), [SRX24UB](#)
- Power distribution: [PDU1215](#), [PS7224](#)
- Tower Stands: 2-9USTAND
- Two Post Rackmount Kit: [2POSTRMKIT](#)

## PACKAGE INCLUDES

- SMART1500RMXL2U UPS System
- PowerAlert software with USB and DB9 cables
- Mounting hardware for 4 post rackmount installation
- Cable for Emergency Power Off interface
- Instruction manual with warranty information

## COMPLETE SPECIFICATIONS

SYSTEM OVERVIEW	
<b>System overview:</b>	Line interactive 2U rack / tower UPS protects internetworking and telecommunications equipment from blackouts, brownouts, overvoltages, surges and line noise. Maintains AC output during blackouts and continuously corrects brownouts and overvoltages from 79 to 147 volts back to normal 120V 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. Supports tower applications with 2USTAND accessory. Includes slot for SNMPWEBCARD and one individually controllable output load bank. Runtime is expandable with BP48V242U and BP48V60RT3U battery packs.
<b>Voltage compatibility:</b>	120 VAC
<b>Frequency compatibility:</b>	60 Hz
OUTPUT	
<b>Output volt amp capacity (VA):</b>	1500
<b>Output watt capacity (watts):</b>	940
<b>Output nominal voltage:</b>	120VAC
<b>Output voltage regulation:</b>	LINE MODE: Sine wave line voltage 120V (-18% / +8%), BATTERY MODE: PWM sine wave output 120V +/-5%
<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>	8 NEMA 5-15R
<b>Customized load management receptacles:</b>	Individually controllable pair 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.
<b>Overload protection:</b>	Resettable circuit breaker
<b>INPUT</b>	
<b>Maximum input amps / watts:</b>	12A / 1073 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
<b>BATTERY</b>	
<b>Full load runtime:</b>	12 minutes (1500VA), 57 minutes with 1 BP48V242U
<b>Half load runtime:</b>	30 minutes (750VA), 117 minutes with 1 BP48V242U
<b>DC system voltage:</b>	48 VDC
<b>Typical battery lifespan:</b>	3-6 years, depending on usage
<b>Battery recharge rate:</b>	2-4 hours to 90%
<b>Expandable battery runtime:</b>	Supports extended runtime with optional external battery packs BP48V242U (limit 1) and BP48V60RT3U (multi-pack compatible)
<b>VOLTAGE REGULATION</b>	
<b>Voltage regulation description:</b>	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
<b>Overvoltage correction:</b>	Input voltages between 128 and 147VAC are reduced by 12%
<b>Direct pass through:</b>	Input voltages between 105 and 127VAC are passed on to connected equipment unchanged
<b>Brownout correction:</b>	Input voltages between 95 and 104VAC are boosted by 12%
<b>Severe brownout correction:</b>	Input voltages between 79 and 94VAC are boosted by 24%
<b>LEDS ALARMS &amp; SWITCHES</b>	
<b>Front panel LEDs:</b>	5 front panel LEDs - Green POWER LED, Green VOLTAGE CORRECTION LED, 3 color BATTERY CHARGE LED, 3 color OUTPUT LOAD LEVEL LED, red BATTERY WARNING LED.
<b>Alarms:</b>	3 function audible alarm indicates power failure conditions (4 short beeps every 10 seconds), overload (continuous short beeps) and low battery (continuous tone)
<b>Switches:</b>	Yes, includes 2 front panel mounted push-button switches for system enable, self-test and alarm cancel functions
<b>SURGE / NOISE SUPPRESSION</b>	
<b>AC surge suppression:</b>	Conforms to IEEE 587 / ANSI C62.41 specifications
<b>AC suppression response time:</b>	Instantaneous
<b>EMI / RFI AC noise suppression:</b>	Yes
<b>PHYSICAL</b>	
<b>Shipping weight (lbs):</b>	62.2
<b>Shipping weight (kg):</b>	28.2
<b>Unit weight (lbs):</b>	52
<b>Unit weight (kg):</b>	23.6
<b>Unit Dimensions (HWD/in):</b>	3.5 x 17.5 x 16.5

<b>Unit Dimensions (HWD/cm):</b>	8.89 x 44.5 x 41.9
<b>Material of construction:</b>	Steel
<b>Form factors supported:</b>	Ships with all accessories required for 2U rackmount installation in a 4 post rack enclosure, 2 post rackmount supported with optional 2POSTRMKIT, supports tower installation with optional 2-9USTAND
<b>Cooling method:</b>	Fan
<b>Battery Access:</b>	Battery access door allows hot swap battery replacement without powering connected equipment off
<b>ENVIRONMENTAL</b>	
<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
<b>COMMUNICATIONS</b>	
<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 via software interface. Compatible with Tripp Lite's PowerAlert 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 SNMPWEBCARD and other network accessories
<b>WatchDog compatibility:</b>	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
<b>LINE / BATTERY TRANSFER</b>	
<b>Transfer time from line power to battery mode:</b>	2-4 milliseconds
<b>Low voltage transfer to battery power:</b>	79V (resets to line power as voltage increases to 83V)
<b>High voltage transfer to battery power:</b>	147V (resets to line power as voltage decreases to 144V)
<b>CERTIFICATIONS</b>	
<b>Certifications:</b>	UL1778 (USA), cUL (Canada), FCC Class A (emissions), NOM (Mexico)
<b>WARRANTY</b>	
<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)
<b>SPECIAL FEATURES</b>	
<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 gray rackmount housing, optional use 2U black front bezel included to enable black color appearance
<b>BATTERY PACK ACCESSORY (optional)</b>	
<b>Battery Pack Accessory (optional):</b>	BP48V24-2U (limit 1) and BP48V60RT3U (multi-pack compatible)



*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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