

Model #: SU1500RTXL2UA

SmartOnline Expandable 2U Rack/Tower UPS System - On-line, double-conversion, sine wave UPS with PDU switching, current monitoring and fault tolerant auto-bypass





1500VA/1.5kVA online, double-conversion, extended-run 2U rack/tower UPS Maintains sine-wave 100/110 or 120V +/-2% output during overvoltages to 138V and brownouts as low as 65V (50/60Hz auto-sensing) Simultaneous communications via HID-compliant USB port, serial port, SNMP/Web card slot and EPO interface Fault tolerant auto-bypass mode, current monitoring and switched PDU control via 2 switchable output load banks

Input: NEMA 5-15P (120V). Output: 6 NEMA 5-15R (120V).

2-year product warranty; \$250,000 Ultimate Lifetime Insurance (USA & Canada only)

Description

1500VA online, double-conversion UPS system for critical server, network and telecommunications equipment. 2U rackmount form factor with an installed depth of only 19 in. Expandable battery runtime with optional BP48V24-2U and BP48V60RT-3U external battery packs. Full-time sine wave 100, 110 or 120V +/-2% output. Uninterruptible Power Supply (UPS) actively converts raw incoming AC power to DC, then re-converts output back to completely regulated, filtered AC output. Operates continuously without using battery power during brownouts to 65V and overvoltages to 138V. NEMA 5-15P input plug and NEMA 5-15R output receptacles. Network-grade AC surge and noise suppression. Zero transfer time between AC and battery operation. Network management interfaces support simultaneous communications via USB port, DB9 serial port and SNMPWEBCARD slot. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X. Supports simultaneous detailed monitoring of equipment load levels, self-test data and utility power conditions via all 3 network interfaces simultaneously. Includes PowerAlert monitoring software and complete cabling. Emergency Power Off (EPO) interface. Integrated two-bank PDU switching supports load shedding and remote reboot of connected equipment. Three-stage metered current monitoring and battery charge status LEDs. LED display panel easily rotates for better viewing in rackmount or tower configurations.Dataline surge suppression for dialup, DSL or network ethernet connection. Utility power and voltage regulation LEDs. Audible alarm. Self-test. Fault-tolerant auto-bypass mode. 4-post rackmount accessories included; 2-9USTAND tower kit and 2POSTRMKITWM 2-post rack & wallmount accessories available. Field replaceable, hot-swappable internal batteries and external battery packs. Attractive all-black color scheme. Two-year warranty and \$250,000pnnected equipment insurance; extended warranty and service contracts available.

Applications

Ideal for protection of critical 120V equipment in server rooms, internetworking closets and telecommunications systems in rackmount or tower applications. Common applications include corporate or departmental servers, workstations, hubs, routers, bridges, CAD/CAM workstations, concentrators, IP telephony and traditional PBX switching systems.

Package Includes

SU1500RTXL2Ua Online Double-Conversion UPS System PowerAlert Software and cabling Mounting hardware for 4 post rack enclosures Instruction manual with warranty information

Features

SmartOnline high-performance UPS system is ideal for critical voice, data, medical and industrial network applications

True on-line, double-conversion UPS provides perfectly regulated sine wave output within 2% of 100/110/120V (user selectable) under all usage conditions

Maintains continuous operation through blackouts, voltage fluctuations and surges with zero transfer time

Removes harmonic distortion, fast electrical impulses, frequency variations and other hard to solve power problems not addressed by other UPS types

Corrects line voltage conditions as low as 65V and as high as 138V back to selectable 100/110/120V (+/-2%) values

Standard internal battery set offers 14 min. runtime at half load (600W) and 5 min. at full load (1200W)

Optional BP48V24-2U external battery pack increases runtime (limit 1)

Optional BP48V60RT3U external battery pack increases runtime (multi-pack compatible)

Compact rackmount form factor installs using only 2 rack spaces (2U) with a maximum installed depth of only 19 in.

Ships with all mounting accessories for 4-post rackmount installation

Optional 2POSTRMKITWM enables 2-post rackmount or wallmount installation

Optional 2-9USTAND accessory enables small-footprint upright tower placement

Fault tolerant auto-bypass maintains continuous utility output to connected equipment, even in cases where the UPS suffers internal failure and requires maintenance

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

HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X. Included PowerAlert UPS monitoring software supports safe unattended shutdown, monitoring and control via local connected servers, plus any number of additional servers over IP

UPS interface supports on-battery, low-battery, power-restored, AC-voltage, DC-voltage, output current monitoring, battery charge current, battery capacity, AC line frequency, timed inverter shutoff, activate self-test, load bank output power control and remote reboot, UPS nominal voltage adjustment and UPS line to battery power voltage setpoints

Built-in Emergency Power Off (EPO) interface with cable

NEMA 5-15P input plug; NEMA 5-15R output receptacles

Integrated 2-bank switched PDU enables remote outlet management for load shedding or remote reboot of individual load banks (bank one has 2 outlets, bank two has 4 outlets)

Front panel LEDs offer current monitoring and battery charge level information

UPS ships fully assembled in full compliance with DOT regulations; no time-consuming connection of internal batteries by user required

Supports 2-post rackmount installation with optional 2POSTRMKITWM accessory

Single-line tel/DSL or network Ethernet surge suppression

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

Specifications

SYSTEM OVERVIEW

SYSTEM OVERVIEW		
Voltage compatibility	120V AC (100/110/120V)	
Frequency compatibility	50/60 Hz compatible (auto-sensing)	
OUTPUT		
Output VA	1500	
Output watts	1200	
Output nominal voltage	120V AC (100/110/120V)	
Output voltage regulation	Maintains full-time sine wave output within 2% of selected nominal, less than 3% total harmonic distortion (linear load) / 5% total harmonic distortion (computer load) (Less than 5% THD on-line and on-battery)	
Output frequency regulation	Regulates line frequency to 50/60Hz +/- 0.05Hz	
Outlet quantity / type	6 x NEMA 5-15R	
Customized load management receptacles	2 controllable load banks support load shedding and remote reboot on demand of locked network devices (bankone has 2 outlets, bank two has 4 outlets)	

Overload protection	20A input breaker
INPUT	
Maximum input amps	12A
Input connection type	NEMA 5-15P
Input cord length	10 ft./3m
Recommended electrical service	120V 15A
BATTERY	
Full load runtime	5 min. with internal batteries (1200W)
Half load runtime	14 min. with internal batteries (600W)
Expandable battery runtime	Supports extended runtime with optional external battery pack BP48V24-2U (limit 1) and BP48V60RT-3U (multi-pack compatible)
DC system voltage	48VDC
Typical battery lifespan	3-6 years, depending on usage
Battery recharge rate	Less than 5 hours to 90%
Replacement Battery Cartridge	RBC94-2U
VOLTAGE REGULAT	TION
Voltage regulation description	On-line, double-conversion power conditioning maintains output within 2% of 100/110/120 volts at all times
Overvoltage correction	Maintains output of selected nominal +/-2% during overvoltages to 138V AC
Brownout correction	Maintains output of selected nominal +/-2% during undervoltages to 65V AC (at loads greater than 70% undervoltage correction extends to 80V)
LEDS ALARMS & SV	VITCHES
Front panel LEDs	LED STATUS DISPLAY: line power (green), on-line (green), bypass (yellow), on battery (green), overload (red), battery low (yellow) - 4 LED LOAD / BATTERY LEVEL DISPLAY (100%, 75%, 50%, 25%). LED display panel easily rotates for better viewing in rackmount or tower configurations.
Alarms	Multi-function audible alarm with distinctive ring patterns offer notification of backup operation (2 seconds on/0.5 seconds off), low battery warning (1.25 seconds on/0.5 seconds off), overload (sounds continuously), UPS fault (4.2 seconds on / 1 second off), input voltage out of frequency (2.1 seconds on/0.14 seconds off) and high input voltage (2.1 seconds on/0.07 seconds off)
Switches	Includes power off/on switch to enable system turn on (press ON switch), UPS battery test (press ON switch during normal AC operation), buzzer silence (press ON switch during battery operation) and OFF (press OFF switch) - all switch functions require that the switch be pressed and held for longer than 2 seconds, but less than 4 seconds
SURGE / NOISE SUP	PRESSION
AC surge suppression	480 joules
AC suppression response time	Instantaneous
Dataline suppression	Set of 8-wire RJ style interface jacks offer surge suppression for network ethernet or TEL/DSL connection. Pins 1,2,3 and 6 offer ethernet protection starting at 7.5V and the center two wires, pins 4 & 5, offer TEL/DSL line suppression starting at 260V
EMI / RFI AC noise suppression	Yes
PHYSICAL	
Shipping weight (Ibs)	54

Shipping weight (kg)	24.5		
Shipping Dimensions (HWD/in)	9.75 x 20.25 x 24		
Shipping Dimensions (HWD/cm)	24.8 x 51.4 x 61		
Unit weight (lbs)	44.1		
Unit weight (kg)	20		
Unit Dimensions (HWD/in)	3.5 x 17.5 x 19		
Unit Dimensions (HWD/cm)	8.9 x 44.4 x 48.3		
Material of construction	Steel		
Form factors supported	Rack (2U)		
Cooling method	Built-in cooling fan		
Battery Access	User replaceable, hot swap battery replacement supported via front access panel		
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.)	612 btu/hr. (87% efficiency line mode)		
Battery mode BTU/hr. (Max.)	667 btu/hr. (86% efficiency battery mode)		
COMMUNICATIONS			
Network monitoring port	Includes USB and DB9 serial ports. Built-in DB9 port offers both enhanced RS-232 enabled monitoring data, plus contact closure monitoring ability. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X.		
Software and cabling included	Yes, includes PowerAlert software CD-ROM and complete cabling		
SNMP compatibility	Yes, includes slot for optional SNMPWEBCARD accessory (#SNMPWEBCARD)		
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 equipmentideal for unattended kiosk applications		
LINE / BATTERY TRA	ANSFER		
Transfer time from line power to battery mode	Zero, online UPS continuously converts incoming AC to DC, then back to AC. When commercial power is interrupted, UPS maintains continuous output from battery reserves with absolutely no disruption in output AC power		
Low voltage transfer to battery power	Maintains continuous operation during undervoltages as low as 65V (80V at load levels over 70%). Below this switchover point, output is supported from battery-derived AC power		
High voltage transfer to battery power	Maintains continuous operation without using battery power during overvoltages to 138V. Above this point, output is supported from battery derived AC power		
CERTIFICATIONS	CERTIFICATIONS		
Certifications	Tested to UL1778 (USA), CSA C22.2 No. 107.3 (Canada), NOM (Mexico), Class A (emissions), FCC Part 68 / Industry Canada (telecommunications)		
WARRANTY			

Product warranty	2-year product warranty	
Connected equipment insurance (USA and Canada Only	\$250,000 connected equipment insurance (USA and Canada only)	
Optional coverage	3-5 year warranties, plus next-day and on-site warranty coverage available for select opportunities. Contact Tripp Lite for additional information.	
SPECIAL FEATURES		
EPO port	Supports "Emergency Power Off" via set of dedicated built-in EPO jacks	
Cold Start	Inverter can be cold started to enable temporary AC output during a power failure	
Appearance	Attractive all-black color scheme	
BATTERY PACK ACCESSORY (optional)		
Battery Pack Accessory (optional)	BP48V24-2U, BP48V60RT3U (optional)	

More information, including related products, owner's manuals, and additional technical specifications, can be found online at www.tripplite.com/products/model.cfm?txtModeIID=2949.

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