



**Tripp Lite**  
1111 West 35th Street  
Chicago, IL 60609 USA  
Telephone: +(773) 869 1234  
E-mail: [saleshelp@tripplite.com](mailto:saleshelp@tripplite.com)

## Model #: SU1000RTXL2UA

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

### Highlights

- 1000VA / 1kVA on-line, double-conversion, extended-run 2U rack / tower UPS
- Zero transfer time, on-line, double-conversion and economy-mode operation supported
- Maintains sine-wave 100/110 or 120V +/-2% output during overvoltages to 150 and brownouts as low as 65V (50/60Hz auto-sensing)
- Simultaneous use 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

1000VA on-line, double-conversion UPS system for critical server, network and telecommunications equipment. 2U rackmount form factor with an installed depth of only 13.5 inches. Extended runtime available with optional BP24V15RT2U (limit 1), BP24V28-2U (limit 1) or BP24V70-3U (multi-pack compatible) external battery packs. Full-time sine wave 100, 110 or 120V output with +/-2% voltage regulation. Online, double-conversion 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 150V. Highly efficient operation in optional economy mode saves BTU heat output and energy costs. NEMA 5-15P input plug; 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. 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. Supports simultaneous detailed monitoring of equipment load levels, self-test data and utility power conditions via all 3 network interfaces. 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. 3-stage metered current monitoring and battery charge status LEDs. LED display panel easily rotates for 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; 2-9U STAND 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. 2-year warranty and \$250,000 [connected equipment insurance](#), extended warranty and service contracts available.

### Package Includes

- SU1000RTXL2Ua Online Double-Conversion UPS System
- PowerAlert Software and cabling
- Mounting hardware for 4 post rack enclosures
- Instruction manual

## 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
- Highly efficient operation in optional economy mode setting, saving BTU heat output and energy costs
- 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 150V back to selectable 100/110/120V (+/-2%) values
- Standard internal battery set offers 14 minutes runtime at half load (400W) and 4.5 minutes at full load (800W)
- Extended runtime available with optional BP24V15RT2U (limit 1), BP24V28-2U (limit 1) or BP24V70-3U (no limit) external battery packs
- Compact rackmount form factor installs using only 2 rack spaces (2U) with a maximum installed depth of only 13.5 inches
- 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 / contact-closure 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 set points
- 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 devices (each load bank consists of one outlet)
- 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
- Single line TEL/DSL or network Ethernet line surge suppression
- 2 year manufacturer's product warranty, \$250,000 [Ultimate Lifetime Insurance](#)

## Specifications

OUTPUT	
Output Volt Amp Capacity (VA)	1000
Output kVA capacity (kVA)	1
Output Watt Capacity (watts)	800
Output power factor	0.8
Crest Factor	3:1
Nominal Output Voltage(s) Supported	100V; 110V; 120V
Nominal Voltage details	120V default
Frequency compatibility	50 / 60 Hz
Frequency compatibility details	Output frequency matches input nominal on startup, defaults to 60 Hz on cold-start

Output voltage regulation (line mode)	+/- 2%
Output voltage regulation (Economy line mode)	+/- 10%
Output voltage regulation (Battery mode)	+/- 2%
Built-in UPS output receptacles	6 5-15R outlet(s)
Built-in controllable switched load banks	Two switchable single-outlet 5-15R load banks
Basic PDU options	<a href="#">PDU1215</a> (1U / 13 5-15R outlets); <a href="#">PDUNV</a> (1U / 2 C19, 12 C13 outlets); <a href="#">PDU1415</a> (0U / 14 5-15R outlets); <a href="#">PDUV15</a> (0U / 12 5-15R outlets)
Metered PDU options	<a href="#">PDUMH15</a> (1U / 13 5-15R outlets); <a href="#">PDUMH15AT</a> (1U / 8 5-15R outlets)*; <a href="#">PDUMV15</a> (0U / 16 5-15R outlets)
Switched PDU options	<a href="#">PDUMH15ATNET</a> (1U / 8 5-15R outlets)*; <a href="#">PDUMV15NET</a> (0U / 16 5-15R outlets)
External PDU redundancy options	*ATS switch options <a href="#">PDUMH15AT</a> & <a href="#">PDUMH15ATNET</a> support dual UPS and hot-swappable UPS configurations
Output AC waveform (AC mode)	Sine wave
Output AC waveform (battery mode)	Sine wave
<b>INPUT</b>	
Rated input current (at maximum load)	8.6A
Nominal Input Voltage(s) Supported	100V AC; 110V AC; 120V AC
UPS input connection type	5-15P
Input circuit breaker	15A
UPS Input cord length (ft.)	10
UPS Input cord length (m)	3
Recommended Electrical Service	15A 120V
<b>BATTERY</b>	
Full load runtime (minutes)	4.5 min. (800w)
Half load runtime (minutes)	14 min. (400w)
Expandable battery runtime	Extended runtime supported via optional external battery packs
External battery pack compatibility	<a href="#">BP24V15RT2U</a> (limit 1); <a href="#">BP24V28-2U</a> (limit 1); <a href="#">BP24V70-3U</a> (multi-pack compatible)
DC system voltage (VDC)	24

<b>Battery recharge rate (included batteries)</b>	Less than 6 hours from 10% to 80%
<b>Replacement battery cartridge (internal UPS battery replacement)</b>	<a href="#">RBC92-2U</a>
<b>Battery Access</b>	Front panel battery access door
<b>Battery replacement description</b>	Hot-swappable, user replaceable batteries
<b>VOLTAGE REGULATION</b>	
<b>Voltage regulation description</b>	Online, double-conversion power conditioning
<b>Overvoltage correction</b>	2% output voltage regulation during overvoltages to 150
<b>Undervoltage correction</b>	2% output voltage regulation during undervoltages to 80
<b>Severe undervoltage correction</b>	2% output voltage regulation during undervoltages to 65 (under 70% load only)
<b>LEDS ALARMS &amp; SWITCHES</b>	
<b>LED Indicators</b>	14 LEDs indicate line power, online mode, economy/bypass mode, on-battery, overload, battery low, replace battery and fault status information; 4-LED meter displays load and battery charge levels; LED panel rotates for viewing in rack/tower formats
<b>Alarms</b>	Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions
<b>Alarm cancel operation</b>	Power-fail alarm can be silenced using alarm-cancel switch
<b>Switches</b>	2 switches control off/on power status and alarm-cancel/self-test operation
<b>SURGE / NOISE SUPPRESSION</b>	
<b>UPS AC suppression joule rating</b>	510
<b>UPS AC suppression response time</b>	Instantaneous
<b>UPS Dataline suppression</b>	1 line TEL / DSL or 10Base T Ethernet protection
<b>EMI / RFI AC noise suppression</b>	Yes
<b>PHYSICAL</b>	
<b>Installation form factors supported with included accessories</b>	4 post 19 inch rackmount (mounting rail kit included)
<b>Installation form factors supported with optional accessories</b>	2 post rackmount (2POSTRMKITWM); Wallmount (2POSTRMKITWM); Tower (2-9USTAND)
<b>Primary form factor</b>	Rackmount
<b>UPS / Power Module dimensions in primary form factor (height x width x depth / inches)</b>	3.5 x 17.5 x 13.5

<b>UPS / Power Module dimensions in primary form factor (height x width x depth / cm)</b>	8.9 x 44.4 x 34.3
<b>Installed whole system total rack space height (rack spaces)</b>	2U
<b>Secondary form factor</b>	Tower (requires <a href="#">2-9USTAND</a> )
<b>Installed whole system dimensions in secondary form factor (height x width x depth / inches)</b>	17.5 x 3.5 x 13.5
<b>UPS dimensions in secondary form factor (height x width x depth / cm)</b>	44.4 x 8.9 x 34.3
<b>UPS / Power Module weight (lbs)</b>	29
<b>UPS / Power Module weight (kg)</b>	13.2
<b>UPS Shipping dimensions (height x width x depth / inches)</b>	9.5 x 20 x 24
<b>UPS Shipping dimensions (height x width x depth / cm)</b>	24.1 x 50.8 x 61
<b>Shipping weight (lbs)</b>	41
<b>Shipping weight (kg)</b>	18.6
<b>UPS housing material</b>	Steel
<b>Cooling method</b>	Fan
<b>ENVIRONMENTAL</b>	
<b>Operating Temperature Range</b>	+32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius
<b>Storage Temperature Range</b>	+5 to +122 degrees Fahrenheit / -15 to +50 degrees Celsius
<b>Relative Humidity</b>	0 to 95%, non-condensing
<b>AC mode BTU / hr. (full load)</b>	406.4
<b>AC economy mode BTU / hr. (full load)</b>	173.6
<b>Battery mode BTU / hr. (full load)</b>	442.8
<b>AC economy mode efficiency rating (100% load)</b>	94%
<b>COMMUNICATIONS</b>	

<b>Communications interface</b>	USB (HID enabled); DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface
<b>Network monitoring port description</b>	Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications
<b>PowerAlert software</b>	Included
<b>Communications cable</b>	USB and DB9 cabling included
<b>WatchDog compatibility</b>	Supports Watchdog application, OS and hard-reboot restart options for remote applications
<b>LINE / BATTERY TRANSFER</b>	
<b>Transfer time</b>	No transfer time (0 ms.) in online, double-conversion mode
<b>Low voltage transfer to battery power (setpoint)</b>	80V (100% load), 65V (
<b>High voltage transfer to battery power (setpoint)</b>	150
<b>SPECIAL FEATURES</b>	
<b>Cold Start (startup in battery mode during a power failure)</b>	Cold-start operation supported
<b>High availability UPS features</b>	Automatic inverter bypass; Hot swappable batteries
<b>Green &amp; high efficiency features</b>	High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy mode operation
<b>CERTIFICATIONS</b>	
<b>UPS Certifications</b>	Tested to UL1778 (USA); Tested to CSA (Canada); Meets FCC Part 15 Category B (EMI); Meets FCC Part 68 / Industrie Canada (telecommunications); ROHS (Reduction of Hazardous Substances)
<b>WARRANTY</b>	
<b>Product Warranty Period (U.S., Canada &amp; Puerto Rico)</b>	2 years
<b>Connected Equipment Insurance (U.S., Canada &amp; Puerto Rico)</b>	\$250,000 connected equipment insurance

## Related Items

### Optional Products

Product Type	Related Model	Description	Qty.
SNMP Accessories	<a href="#">SNMPWEBCARD</a>	For remote monitoring and control via SNMP, Web, or Telnet.	-
SNMP Accessories	<a href="#">ENVIROSENSE</a>	Monitors temperature, humidity and contact-closure inputs. (Requires SNMPWEBCARD or switched PDU.)	-
UPS Accessories	<a href="#">RELAYIOCARD</a>	Programmable Relay I/O Card	-
UPS Accessories	<a href="#">MODBUSCARD</a>	For remote monitoring and control via MODBUS protocol	-
Shutdown Cable Kits	<a href="#">AS400CABLE KIT</a>	Power Management Tools - UPS Communication Cable Kit for System i / AS400 / iSeries Servers	-
Tower Stands	<a href="#">2-9USTAND</a>	Enables Tower Placement of Rackmount UPS Systems	-

Rackmount/Wallmount Kits	<a href="#">2POSTRMKITWM</a>	Enables 2-Post Rackmount or Wallmount Installation of Select Rackmount UPS Systems	-
External Battery Packs	<a href="#">BP24V15RT2U</a>	BP24V15RT2U - External Battery Pack for UPS System	-
External Battery Packs	<a href="#">BP24V28-2U</a>	BP24V28-2U - External Battery Pack for UPS System	-
External Battery Packs	<a href="#">BP24V70-3U</a>	BP24V70-3U - External Battery Pack for UPS System	-
Extended Warranties	<a href="#">WEXT3-500-1500</a>	3-Year Extended Warranty - For Smart Line-Interactive and Online Tower or Rack models, 1500VA or less	-
Extended Warranties	<a href="#">WEXT5-500-1500</a>	5-Year Extended Warranty - For Smart Line-Interactive and Online Tower or Rack models, 1500VA or less	-
Power Distribution	<a href="#">PDUB15</a>	Dual source Power Distribution Unit / PDU with Manual Transfer Switch enables Hot-swappable UPS Replacement in Critical Network Applications	-
Power Distribution	<a href="#">PDU1215</a>	Basic PDU / Power Distribution Unit - Safe, reliable power distribution for critical networking equipment	-
Power Distribution	<a href="#">PDUNV</a>	Basic PDU / Power Distribution Unit - Safe, reliable power distribution for critical networking equipment	-
Power Distribution	<a href="#">PDUV15</a>	Safe, reliable power distribution for critical networking equipment	-
Power Distribution	<a href="#">PDUMH15</a>	Metered PDU / Power Distribution Unit - Safe, reliable power distribution with digital current meter	-
Power Distribution	<a href="#">PDUMV15</a>	Metered PDU / Power Distribution Unit - Safe, reliable power distribution with digital current meter	-
Power Distribution	<a href="#">PDUMH15AT</a>	Metered PDU with ATS - Power Distribution Unit with dual-input Auto Transfer Switching	-
Power Distribution	<a href="#">PDUMNH15</a>	Monitored PDU / Power Distribution Unit supports real-time remote monitoring of load level, voltage and frequency with options for remote environmental and security monitoring	-
Power Distribution	<a href="#">PDUMNV15</a>	Monitored PDU / Power Distribution Unit supports real-time remote monitoring of load level, voltage and frequency with options for remote environmental and security monitoring	-
Power Distribution	<a href="#">PDUMH15ATNET</a>	Switched, Metered PDU with ATS - Power Distribution Unit with dual-input Auto Transfer Switching, individual outlet control and remote network interface	-
Power Distribution	<a href="#">PDUMV15NET</a>	Switched, Metered PDU with Remote Monitoring - 0U Vertical Rackmount Power Distribution Unit for Networks with Individually Switchable Outlets, Current Metering, Remote Monitoring and Control	-
Power Cables	<a href="#">P007-002</a>	2-ft. Heavy-Duty 14AWG Power cord (IEC-320-C13 to NEMA 5-15P)	-
Power Cables	<a href="#">P007-006</a>	6-ft. Heavy-Duty 14AWG Power cord (IEC-320-C13 to NEMA 5-15P)	-
Power Cables	<a href="#">P007-010</a>	10-ft. Heavy-Duty 14AWG Power cord (IEC-320-C13 to NEMA 5-15P)	-
Power Cables	<a href="#">P010-012</a>	12-ft. 18AWG Power cord (NEMA 5-15P to IEC-320-C13)	-
Power Cables	<a href="#">P022-001</a>	1-ft. 18AWG Power Extension cord (NEMA 5-15R to NEMA 5-15P)	-
Power Cables	<a href="#">P023-001</a>	1-ft. 14AWG Power Adapter cord (NEMA L5-15R to NEMA 5-15P)	-
Power Cables	<a href="#">P034-010</a>	10-ft. 14AWG Heavy Duty Power cord (IEC-320-C19 to NEMA 5-15P)	-

More information, including related products, owner's manuals, and additional technical specifications, can be found online at [www.tripplite.com/en/products/model.cfm?txtModelID=2948](http://www.tripplite.com/en/products/model.cfm?txtModelID=2948).

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