

## Model #: SU3000RTXL2U

# 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

- 3000VA / 3 kVA / 2500 watt on-line, double-conversion, extended-run 2U rack / tower UPS
- Economy mode option offers 97% efficiency, reduces power consumption and BTU emissions
- Maintains selectable 100/110/115/120/127V +/-2% output during brownouts and overvoltages from 70 to 144V (50/60 Hz auto-sensing)
- Simultaneous communications via USB, serial, contact-closure, EPO and SNMP/Web card slot accessory
- Fault-tolerant auto-bypass, current monitoring and 2 independently switchable output load banks
- Input: L5-30P (120V) / Output: 6 5-15/20R & 1 L5-30R (120V)
- 2 year product warranty / \$250,000 Ultimate Lifetime Insurance (USA & Canada only)

### Description

3000VA / 3kVA / 2500 watt on-line, double-conversion UPS system for critical server, network and telecommunications equipment. 2U rackmount form factor with an installed depth of only 26 inches (66cm). Expandable battery runtime with optional BP72V15-2U (limit 1) and BP72V28RT3U (multi-pack compatible) external battery packs. Full time sine wave 100/110/115/120/127V output with +/-2% voltage regulation. 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 70V and overvoltages to 144V. Up to 97% efficiency in optional economy mode saves BTU heat output and energy costs. NEMA L5-30P input plug. NEMA L5-30R, NEMA 5-15/20R and NEMA 5-15R output receptacles. Network-grade AC surge and noise suppression. Zero transfer time between AC and battery operation. Network management interfaces include 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 mains power conditions via all network interfaces. Includes PowerAlert monitoring software and complete cabling. Emergency Power Off (EPO) interface. Integrated two bank PDU switching supports automated load shedding and remote-reboot of connected equipment. Multi-stage metered current monitoring and battery charge status LEDs. Mains power and voltage regulation LEDs. Audible Alarm. Self-test. Fault-tolerant auto-bypass mode. LED display panel easily rotates for better viewing in rackmount or tower configurations. Includes 4 post rackmount accessories. 2-9USTAND tower kit and 2POSTRMKITWM two post rackmount and wall-mount hardware accessories available. Field replaceable, hot swappable internal batteries and external battery packs. 2-year warranty and \$250,000 connected equipment insurance; extended warranty and service contracts available.

#### Applications

DISTRIBUTED SERVER ROOMS; NETWORK CLOSETS; SMALL BUSINESS NETWORKS; SMALL BUSINESS PHONE SYSTEM

#### Package Includes

- SU3000RTXL2U UPS System
- 4 post rackmount installation brackets
- PowerAlert Software CD and cabling

• Owner's manual with warranty information

#### **Features**

- SmartOnline high-performance UPS system is ideal for critical voice, data, medical and industrial network applications
- Optional economy-mode operation with 97% efficiency for reduced power consumption and cooler operation
- Economy mode is schedulable via PowerAlert UPS management software for daily or weekly hours of operation to enable precision output during peak operating hours and high efficiency, low BTU emission operation during off-peak times
- Maintains continuous operation through blackouts, voltage fluctuations
- On-line, double-conversion mode provides perfectly regulated sine wave output within 2% of 100/110/115/120/127V (user selectable) with zero transfer time
- Supports operation at 50/60Hz (auto-sensing) with the ability for full-time frequency conversion from 50 to 60Hz or 60 to 50Hz (frequency conversion de-rates UPS capacity by 20%)
- 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 70V and as high as 144V to within 2% of selected nominal voltage
- Standard internal battery set offers 15 minutes runtime at half load (1250W) and 6 minutes at full load (2500W)
- Expandable battery runtime with optional BP72V15-2U and BP72V28RT-3U external battery packs
- . Compact rackmount form factor installs using only 2 rack spaces (2U) with a depth of only 26 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 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 setpoints
- Built-in Emergency Power Off (EPO) interface with cable
- NEMA L5-30P input plug / NEMA 5-15/20R & L5-30R output receptacles
- Integrated 2 bank switched PDU enables remote outlet management for load shedding or remote reboot of individual load banks (each bank has 3 outlets)
- Front panel LEDs offer current monitoring and battery charge level information
- Network grade AC surge suppression
- Field replaceable, hot swappable internal batteries and external battery packs
- 2 year manufacturer's product warranty; \$250,000 Ultimate Lifetime Insurance
- Extended warranty and service contracts available

#### **Specifications**

OUTPUT	
Output Volt Amp Capacity (VA)	3000
Output kVA capacity (kVA)	3
Output Watt Capacity (watts)	2500
Output kW capacity	2.5
Output power factor	0.8
Output Capacity Details	Max output is 3000VA 2400W at 100V, 110V, 115V nominal settings
Crest Factor	3:1

Nominal Output Voltage(s) Supported	100v; 110v; 115v; 120v; 127v
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. Frequency conversion from 60 to 50 Hz -or- 50 to 60 Hz supported. Output capacity de-rates by 20% during frequency conversion operation.
Output voltage regulation (line mode)	+/- 2%
Output voltage regulation (Economy line mode)	-12%, + 10%
Output voltage regulation (Battery mode)	+/- 2%
Built-in UPS output receptacles	6 5-15/20R outlet(s); 1 L5-30R outlet(s)
Built-in controllable switched load banks	Two switchable three-outlet load banks
Output circuit breaker	20A (x2) - each breaker protects 3 5-15/20R outlets, L5-30R outlet is un-breakered
Basic PDU options	PDU2430 (1U / 24 5-15R outlets)
Metered PDU options	PDUMV30 (0U / 24 5-15/20R outlets)
Switched PDU options	PDUMH30NET (2U / 16 5-15/20R outlets); PDUMV30NET (0U / 24 5-15/20R outlets)
External PDU redundancy options	*ATS switch options PDUMH20AT & PDUMH20ATNET support dual UPS and hot-swappable UPS configurations
Output AC waveform (AC mode)	Sine wave
Output AC waveform (battery mode)	Sine wave
INPUT	
Rated input current (at maximum load)	24A
Nominal Input Voltage(s) Supported	100V AC; 110V AC; 115V AC; 120V AC; 127V AC
UPS input connection type	L5-30P
UPS Input cord length (ft.)	10 ft / 3m
Recommended Electrical Service	30A 120V
Input cord length (ft.)	10
Input cord length (m)	3
BATTERY	
Full load runtime (minutes)	6 min. (2500w)

Half load runtime (minutes)	15 min. (1250w)
Expandable battery runtime	Supports extended runtime with optional external battery packs
External battery pack compatibility	BP72V15-2U (limit 1); BP72V28RT-3U (multi-pack compatible)
DC system voltage	72V DC
Battery recharge rate (included batteries)	Less than 4.8 hours from 10% to 90%
Replacement battery cartridge (internal UPS battery replacement)	RBC96-2U
Battery Access	Front panel battery access door
Battery replacement description	Hot-swappable, replaceable batteries
VOLTAGE REGULATIO	N
Voltage regulation description	Online, double-conversion power conditioning
Overvoltage correction	2% output voltage regulation during overvoltages to 144
Undervoltage correction	2% output voltage regulation during undervoltages to 80
Severe undervoltage correction	2% output voltage regulation during undervoltages to 70V (under 66% load only) or 60V (under 33% load only)
LEDS ALARMS & SWIT	CHES
LED Indicators	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
Alarms	Audible alarm indicates power failure, low battery, overload, replace battery and EPO operation
Alarm cancel operation	Power-fail alarm can be silenced using alarm-cancel switch
Switches	2 Switches control off/on power status and alarm-cancel/self-test operation
SURGE / NOISE SUPPR	ESSION
UPS AC suppression joule rating	504 joules
EMI / RFI AC noise suppression	Yes
AC suppression response time	Instantaneous
PHYSICAL	
Installation form factors supported with included accessories	4 post 19 inch rackmount (mounting rail kit included)
Installation form factors supported with optional accessories	2 post rackmount (2POSTRMKITWM); Wallmount (2POSTRMKITWM); Tower (2-9USTAND)

Primary form factor	Rackmount
UPS / Power Module dimensions in primary form factor (height x width x depth / inches)	3.5 x 17.3 x 26
UPS / Power Module dimensions in primary form factor (height x width x depth / cm)	8.9 x 43.9 x 66
Installed whole system total rack space height (rack spaces)	2U
Secondary form factor	Tower (requires 2-9USTAND)
Installed whole system dimensions in secondary form factor (height x width x depth / inches)	17.3 x 3.5 x 26
UPS dimensions in secondary form factor (height x width x depth / cm)	43.9 x 8.9 x 66
UPS / Power Module weight (lbs)	68.8
UPS / Power Module weight (kg)	31.2
UPS Shipping dimensions (height x width x depth / inches)	9 x 22 x 32.8
UPS Shipping dimensions (height x width x depth / cm)	22.9 x 55.9 x 83.3
Shipping weight (lbs)	78.3
Shipping weight (kg)	35.5
UPS housing material	Steel
Cooling method	Fan
ENVIRONMENTAL	
Operating Temperature Range	+32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius
Storage Temperature Range	+5 to +122 degrees Fahrenheit / -15 to +50 degrees Celsius
Relative Humidity	0 to 95%, non-condensing
AC mode BTU / hr. (full load)	1000
AC economy mode BTU / hr. (full load)	241
Battery mode BTU / hr. (full load)	1500

AC economy mode efficiency rating (100% load)	97%
COMMUNICATIONS	
Communications interface	USB (HID enabled); DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface
Network monitoring port description	Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications
PowerAlert software	Included
Communications cable	USB and DB9 cabling included
WatchDog compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications
LINE / BATTERY TRANS	SFER
Transfer time	No transfer time (0 ms.) in online, double-conversion mode
Low voltage transfer to battery power (setpoint)	80V (100% load), 70V (66% load), 60V (33% load)
High voltage transfer to battery power (setpoint)	144
SPECIAL FEATURES	
Cold Start (startup in battery mode during a power failure)	Cold-start operation supported
High availability UPS features	Automatic inverter bypass; Hot swappable batteries
Green & high efficiency features	High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy mode operation; Online, double-conversion UPS with precision output voltage regulation
CERTIFICATIONS	
UPS Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Tested to NOM (Mexico); Meets FCC Part 15 Category A (EMI); ROHS (Reduction of Hazardous Substances)
WARRANTY	
Product Warranty Period (U.S., Canada & Puerto Rico)	2 years
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 connected equipment insurance

#### **Related Items**

#### **Optional Products**

Product Type	Related Model	Description	Qty.
External Battery Packs	BP72V15-2U	BP72V15-2U - External Battery Pack for UPS System (limit 1)	-
External Battery Packs	BP72V28RT-3U	BP72V28RT-3U - External Battery Pack for UPS System (limit 1)	-
Power Distribution	PDU2430	Basic PDU / Power Distribution Unit - Safe, reliable power distribution for critical networking equipment	-

Power Distribution	PDUMV30	Metered 0U Vertical Rack PDU - Metered Power Distribution Unit for Network Applications	-
Power Distribution	PDUMV30NET	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 Distribution	PDUMH30NET	Switched, Metered PDU with Remote Monitoring - 2U Rackmount Power Distribution Unit for Networks with Individually Switchable Outlets, Current Metering, Remote Monitoring and Contro	-
Rackmount/Wallmount Kits	2POSTRMKITWM	Allows for 2 post rack mounting or wall mounting of Tripp Lite 2U-4U rackmount UPS systems and battery packs	-
Shutdown Cable Kits	AS400CABLE KIT	Power Management Tools - UPS Communication Cable Kit for System i / AS400 / iSeries Servers	-
SNMP Accessories	ENVIROSENSE	Power Management Tools - Environmental Sensor	-
SNMP Accessories	SNMPWEBCARD	Power Management Tools - Internal SNMP/Web Card	-
SNMP Accessories	RELAYIOCARD	Programmable Relay I/O Card	-
Tower Stands	2-9USTAND	Tower Stand - Expandable Tower Base Stand UPS Accessory	-
Extended Warranties	WEXT3-2200-3000	3-Year Extended Warranty - For Smart Line-Interactive and Online Tower or Rack models, 2200-3000VA	-
Extended Warranties	WEXT5-2200-3000	5-Year Extended Warranty - For Smart Line-Interactive and Online Tower or Rack models, 2200-3000VA or less	-

More information, including related products, owner's manuals, and additional technical specifications, can be found online at www.tripplite.com/en/products/model.cfm?txtModeIID=4210.

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