

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

Telephone: 773.869.1234 www.tripplite.com

# SmartOnline 120V 3kVA 2.7kW Double-Conversion UPS, 2U Rack/Tower, Extended Run, Network Card Slot, LCD, USB, DB9 Serial

MODEL NUMBER: SU3000RTXLCD2U











### Description

Tripp Lite Smart Online UPS systems offer high performance power protection ideal for critical server and network equipment in datacenters, computer rooms and network closets. Online, double-conversion Uninterruptible Power Supply (UPS) maintains perfectly regulated output power by continuously converting raw AC input to DC, then re-converting output back to AC. Fully regulated sine wave AC output with +/-2% voltage regulation powers network equipment continuously, even during severe brownouts and overvoltages, all without depleting UPS battery reserves. Maintains battery-derived AC output during power failures with zero transfer time. Extended runtime options available. Interactive LCD interface reports UPS operating mode, detailed UPS and site-power data, plus enables a variety of UPS setup and configuration options. Up to 99% efficiency with economy mode option saves BTU heat output and energy costs. Network management interfaces support communications via USB, RS-232, contact-closure and optional network management card options. Built-in DB9 port offers both enhanced RS-232 data and basic 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. PowerAlert UPS monitoring software is available via free download. Emergency Power Off (EPO) interface. LED display reports UPS operating mode, line power availability, battery mode operation, inverter operation, ECO mode status and output power availability. Audible alarm with push-button momentary alarm-cancel and silent-mode LCD configuration options. Frequency regulation and conversion options for all 50/60Hz applications. Programmable self-test. Battery independent restart. Fault-tolerant auto-bypass mode. Field-replaceable, hot-swappable internal batteries and external battery packs.

### Features

- Tripp Lite SU3000RTXLCD2U high performance 3000VA / 3kVA / 2700W on-line, double-conversion 2U rackmount UPS is ideal for all critical voice, data, medical and industrial IT applications
- Selectable 100/110/120/127V 50/60Hz input / output compatibility
- NEMA L5-30P input, 4 NEMA 5-15/20R, 4 5-15R & 1 L5-30R outlets
- Two switched 4-outlet load banks support remote reboot or programmable load shedding options
- Supports 2% output voltage regulation with zero transfer time in online, double conversion mode
- High 99% efficiency operation is available using the Economy mode option for reduced power consumption and lower BTU emissions
- Economy mode is schedulable via PowerAlert UPS management software for daily or weekly hours of
  operation for precision output during peak hours and high efficiency, low BTU operation during off-peak

## **Highlights**

- 3000VA / 3kVA / 2700W on-line double-conversion 2U rackmount UPS
- 100/110/120/127V 50/60Hz output; High 98% full load efficiency economy mode option
- Interactive LCD with 9 selectable screens of UPS and site power data
- Expandable runtime, Hot-swap batteries, 25.5 in / 64.8 cm depth
- USB, RS232 & EPO ports, Network management card options
- 2 independently switched 4 outlet load banks; Energy Star Qualified
- NEMA L5-30P input; 4 NEMA 5-15R, 4 5-15/20R & 1 L5-30R outlets

#### **Package Includes**

- SU3000RTXLCD2U UPS System
- USB, Serial & EPO cabling
- 4 post rackmount installation kit
- Instruction manual



#### times

- 11.3 minutes runtime at 50% load (1350W) and 4.1 minutes at 100% load (2700W) using internal batteries
- BP72V15-2U (limit 1), BP72V18-2US (no limit) or BP72V28RT3U (no limit) external battery packs available (some configurations require Tripp Lite's External Battery Configuration Software)
- Intelligent battery management system extends battery life
- LCD interface reports operating mode plus 9 selectable screens of UPS data (Load percentage, kW & kVA, Power factor, Input voltage & frequency, Output voltage & frequency, Battery voltage and charge percentage, Minutes runtime, Capacity remaining and Kw/hr. consumption)
- LCD interface also supports 16 screens of UPS configuration and setup options
- 4 post installation hardware included, Optional 2POSTRMKITWM enables 2 post rack installation
- 2-9USTAND accessory enables upright tower installation capability
- Electronic bypass maintains utility output during a variety of UPS fault conditions
- Battery independent restart ensures automatic UPS power-up without user interaction after lengthy power outages, even when batteries are expired and require replacement
- Frequency regulation / conversion mode offers generator-compatible frequency correction or conversion
  of frequency from 50 to 60Hz or 60 to 50Hz
- · Built-in USB, RS-232, contact-closure and slot for network management card options
- Compatible with Tripp Lite UPS management card options TLNETCARD, WEBCARDLX, SNMPWEBCARD, MODBUSCARD and RELAYIOCARD
- HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X
- USB & Serial ports enable data-saving unattended shutdown when used with Tripp Lite's PowerAlert software, available via FREE download from www.tripplite.com/poweralert

# **Specifications**

OVERVIEW		
UPC Code	037332180100	
UPS Type	On-Line	
INPUT		
Rated input current (Maximum Load)	24A	
Nominal Input Voltage(s) Supported	100V AC; 110V AC; 115V AC; 120V AC; 127V AC	
Nominal Input Voltage Description	120V factory default	
UPS Input Connection Type	L5-30P	
Input Circuit Breakers	40A	
UPS Input Cord Length (ft.)	10	
UPS Input Cord Length (m)	3.1	
Recommended Electrical Service	30A 120V	
Input Phase	Single-Phase	
ОИТРИТ		



Output Volt Amp Capacity (VA)	3000
Output Capacity (kVA)	3
Output Watt Capacity (Watts)	2700
Output kW Capacity (kW)	2.7
Output Capacity Details	ON LINE MODE: Maximum output capacity is reduced to 2430W (115V), 2295W (110V) and 2160W (100V); FREQUENCY REGULATION / CONVERSION MODE: Maximum output ratings are reduced in frequency regulation / conversion mode (127/120V 1890 watts / 115V 1701 watts / 110V 1606 watts / 100V 1512 watts).  OVERLOAD CAPACITY: Supports inverter operation up to 105% load continuously, 125% load for 3 minutes; 150%
	load for 30 seconds and >150% load for 0.5 seconds before switching to BYPASS (when bypass input voltage and frequency are WITHIN bypass limits) or SHUTDOWN (when bypass input voltage or frequency are OUTSIDE bypass limits)
Power Factor	0.9
Crest Factor	3:1
Nominal Voltage Details	120V factory-default nominal voltage
Frequency Compatibility	50 / 60 Hz; Supports 50 to 60 Hz and 60 to 50 Hz conversion
Frequency Compatibility Details	ON LINE MODE: Output frequency is automatically configured to match nominal input frequency on startup; Output matches input frequency when +/-5Hz of nominal; Output is regulated to +/-0.05Hz when input frequency exceeds +/-5Hz of nominal. UPS switches to battery mode when input frequency is below 40Hz or above 70Hz. FREQUENCY REGULATION / CONVERSION MODE: Output is regulated to +/-0.05Hz of selected output frequency input is 40 to 70Hz; UPS switches to battery mode when input frequency is below 40Hz or above 70Hz. BATTERY MODE: Output is regulated to +/-0.05Hz.
Output Voltage Regulation (Line Mode)	+/- 2%
Output Voltage Regulation (Economy Line Mode)	+/- 10%
Output Voltage Regulation (Battery Mode)	+/- 2%
Load Management Receptacles	Two switchable four-outlet load banks
Output AC Waveform (AC Mode)	Pure Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
Nominal Output Voltage(s) Supported	100V; 110V; 115V; 120V; 127V
Output Receptacles	(4) 5-15R; (4) 5-15/20R; (1) L5-30R
Individually Controllable Load Banks	Yes
BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
Full Load Runtime (min.)	4.1 min. (2700w)
Half Load Runtime (min.)	11.3 min. (1350w)
Expandable Battery Runtime	Extended runtime supported via optional external battery packs
Expandable Runtime	Yes
Expandable Runtime Description	Some external battery configurations require the use of Tripp Lite's External Battery Configuration Software, see manual for details





External Battery Pack Compatibility	<a class="productLink" href="//www.tripplite.com/External-72V-2U-RackTower-Battery-Pack-for-Select-Tripp-Lite-UPS-Systems~BP72V15-2U">BP72V15-2U</a> (limit 1); <a class="productLink" href="//www.tripplite.com/External-72V-3U-Rack-Tower-Battery-Pack-Select-Tripp-Lite-UPS-systems~BP72V28RT-3U">BP72V28RT-3U</a> (multi-pack compatible); <a class="productLink" href="//www.tripplite.com/External-72V-2U-Rack-Tower-Battery-Pack-for-Tripp-Lite-UPS-Systems~BP72V18-2US">BP72V18-2US</a> (multi-pack compatible)
DC System Voltage (VDC)	72
Battery Recharge Rate (Included Batteries)	Less than 3 hours recharge to 90% (typical, full load discharge)
Battery Access	Front panel battery access
Internal UPS Replacement Battery Cartridge	<a class="productLink" href="//www.tripplite.com/Replacement-Battery-Cartridge-72V-Tripp-Lite-SmartOnline-UPS-Systems~RBC72S">RBC72S</a>
Battery Replacement Description	Hot-swappable, user replaceable batteries
VOLTAGE REGULATION	
Voltage Regulation Description	Online, double-conversion power conditioning maintains 2% output voltage regulation during brownouts and overvoltages
Overvoltage Correction	Corrects overvoltages to 150V (0-100% load)
Undervoltage Correction	Corrects undervoltages to 90V at full load (90V at 100V nominal)
Severe Undervoltage Correction	Corrects brownouts to 70V (70% load) & 55V (33% load)
USER INTERFACE, ALERTS & COM	ITROLS
Front Panel LCD Display	Front panel LCD information and configuration screen offers detailed UPS and site power status and operating data, plus configuration of voltage, frequency, operating mode, alarm function and a variety of additional options
Switches	2 switches control off/on power status and alarm-cancel operation; 2 additional scroll-down and scroll-up / select options enable LCD status viewing and configuration options
Alarm Cancel Operation	Power-fail alarm can be temporarily silenced using alarm-cancel switch; silent mode alarm configuration option available
Audible Alarm	Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions
LED Indicators	7 front panel LEDs indicate line power availability, AC to DC conversion, battery mode operation, inverter mode, eco mode operation, bypass mode operation and AC output status
SURGE / NOISE SUPPRESSION	
UPS AC Suppression Joule Rating	570
UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
PHYSICAL	
Primary Form Factor	Rackmount
Cooling Method	Fan
Included Mounting Accessory Description	Includes 4 post rackmount installation accessories



Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount
Installation Form Factors Supported with Optional Accessories	2 post rackmount ( <a class="productLink" href="//www.tripplite.com/2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM">2POSTRMKITWM</a> ); Tower ( <a class="productLink" href="//www.tripplite.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2-9USTAND</a> ); Wallmount ( <a class="productLink" href="//www.tripplite.com/2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM">2POSTRMKITWM</a> )
Minimum Required Rack Depth with External Battery Pack (cm)	80
Minimum Required Rack Depth with External Battery Pack (in.)	31.5
Minimum Required Rack Depth without External Battery Pack (cm)	79
Minimum Required Rack Depth without External Battery Pack (in.)	31
Primary UPS Depth (mm)	648
Primary UPS Height (mm)	86
Primary UPS Width (mm)	439
Rack Height	2U
Shipping Dimensions (hwd / cm)	23.11 x 61.21 x 100.33
Shipping Dimensions (hwd / in.)	9.10 x 24.10 x 39.50
Shipping Weight (kg)	41.73
Shipping Weight (lbs.)	92.00
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	8.64 x 43.94 x 64.77
UPS Power Module Dimensions (hwd, in.)	3.4 x 17.3 x 25.5
UPS Power Module Weight (kg)	31.98
UPS Power Module Weight (lbs.)	70.5
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)	801
AC Economy Mode BTU / Hr. (Full Load)	188
Battery Mode BTU / Hr. (Full Load)	1626
AC Economy Mode Efficiency Rating (100% Load)	98%
Audible Noise	50 dBA at 1m front side





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Operating Elevation (m)	Up to 3000m		
COMMUNICATIONS	COMMUNICATIONS		
Network Management Cards	SNMPWEBCARD; <a class="productLink" href="//www.tripplite.com/Web-Management-Accessory-Card-SmartPro-SmartOnline-UPS-Systems~TLNETCARD">TLNETCARD</a> ; <a class="productLink" href="//www.tripplite.com/Web-Management-Accessory-Card~WEBCARDLX">WEBCARDLX</a> ; <a class="productLink" href="//www.tripplite.com/MODBUS-Management-Accessory-Card-UPS-Remote-Monitoring-Control-MODBUSCARD">MODBUSCARD</a> ; <a class="productLink" href="//www.tripplite.com/Programmable-Relay-I-O-Card~RELAYIOCARD">RELAYIOCARD</a>		
Network Monitoring Port Description	Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications		
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert Local software at https://www.tripplite.com/poweralert		
Communications Cable	USB and DB9 cabling included		
WatchDog Compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications		
Network Management Card Description	Network management card optional		
Communications Interface	Contact closure; DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface; USB (HID enabled)		
LINE / BATTERY TRANSFER	LINE / BATTERY TRANSFER		
Transfer Time	Zero (0 milliseconds) in double-conversion mode; 4 milliseconds economy mode		
Low Voltage Transfer to Battery Power (Setpoint)	55V at 33% load, 70V at 70% load, 100V at 100% load (90V full load at 100V nominal setting)		
High Voltage Transfer to Battery Power (Setpoint)	150		
FEATURES & SPECIFICATIONS			
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported		
High Availability UPS Features	Auto Probe Monitoring and Reboot (requires WEBCARDLX); Automatic inverter bypass; Expandable battery backup; Hot swappable batteries; On-Line/Double-Conversion; Remote management; Sine wave output; Surge/noise protection; Zero transfer time		
Green Energy-Saving Features	High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy mode operation		
STANDARDS & COMPLIANCE			
Product Certifications	CSA (Canada); UL 1778		
Product Compliance	RoHS; ENERGY STAR Qualified; FCC Part 15 Class A (USA)		
WARRANTY			
Product Warranty Period (Worldwide)	2-year limited warranty		
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 <a class="insuranceLink" href="//www.tripplite.com/support/insurance-policy">Ultimate Lifetime Insurance</a>		

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Tripp Lite
1111 W. 35th Street
Chicago, IL 60609 USA
Telephone: 773.869.1234
www.tripplite.com

Tripp Lite uses primary and third-party agencies to test its products for compliance with standards. See a list of Tripp Lite's testing agencies: <a href="https://www.tripplite.com/products/product-certification-agencies">https://www.tripplite.com/products/product-certification-agencies</a>