

# SmartOnline 120V 3kVA 2.4kW Double-Conversion UPS, 3U, Extended Run, Oversize Batteries, Network Card Slot, USB, DB9

MODEL NUMBER: SU3000RTXR3U







#### Description

3000VA / 3kVA online, double-conversion UPS system for critical server, network and telecommunications equipment. "XR" configuration offers twice the battery capacity as comparable "XL" version. 3U rackmount form factor with an installed depth of 26 inches (66cm). Expandable battery runtime with optional BP72V15-2U (limit 1), BP72V28RT-3U (multi-pack compatible) and BP72V18-2US (multi-pack compatible) external battery packs. Full time sine wave 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 setting, saves BTU heat output and energy costs. NEMA L5-30P input plug. NEMA 5-15R, NEMA 5-15/20R and NEMA L5-30R 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 slot for network management card options. 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. Supports simultaneous detailed monitoring of equipment load levels, self-test data and mains power conditions via all 3 network interfaces. PowerAlert UPS monitoring software is available via free download. Emergency Power Off (EPO) interface. Integrated two bank PDU switching supports load shedding and remote-reboot of connected equipment. Multi-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. Mains power and voltage regulation LEDs. Audible Alarm. Self-test. Fault-tolerant auto-bypass mode. 4 post rackmount accessories included; 2-9USTAND tower kit and 2POSTRMKITHD 2-post rackmount accessories available. Field replaceable, hot swappable internal batteries and external battery packs. Attractive all-black UPS design. \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only).

### **Features**

- SmartOnline high power density UPS system is ideal for critical voice, data, medical and industrial network applications
- Special "XR" version offers larger internal batteries for longer runtimes than standard "XL" model
- True online, double-conversion UPS provides perfectly regulated sine wave output within 2% of 120V under all usage conditions
- Maintains continuous operation through blackouts, voltage fluctuations and surges with zero transfer

### **Highlights**

- 3000VA / 3kVA / 2400 watt online double-conversion 3U rack/tower UPS
- 120V +/-2% output at 50/60Hz, high efficiency economy mode option
- Oversize internal batteries, Expandable runtime, Hot-swap battery modules
- USB, RS232 & EPO ports; slot for network management card options
- Front panel status LEDs with detailed load and battery metering
- 2 independently switchable output load banks
- NEMA L5-30P input; L5-30R, 5-15/20R & 5-15R outlets
- To use the Auto Probe feature, this product requires a WEBCARDLX network interface (sold separately) running LX firmware update 15.5.2 or later

## **Package Includes**

- SU3000RTXR3U SmartOnline High Power Density UPS System
- USB, DB9 and EPO Cabling
- Owner's manual with warranty information



#### 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 150V back to 120V (+/-2%) values
- · Highly efficient operation in optional economy mode setting, saving BTU heat output and energy costs
- Standard internal battery set offers 30 minutes runtime at half load (1200W) and 12 minutes at full load (2400W)
- Optional BP72V15-2U (limit 1), BP72V28RT-3U (multi-pack compatible) and BP72V18-2US (multi-pack compatible) external battery packs
- · Intelligent battery management system extends battery life
- Some external battery configurations require the use of External Battery Configuration Software (see manual)
- Compact rack-mount form factor installs using only 3 rack spaces (3U) with a maximum installed depth of 26 inches
- Ships with all mounting accessories for 4-post rack-mount installation
- Optional 2POSTRMKITHD enables 2-post rack-mount installation
- · Optional 2-9USTAND accessory enables small-footprint upright tower placement
- · Fault tolerant electronic bypass maintains utility output during a variety of UPS fault conditions
- Network interfaces support simultaneous communications via built-in USB, DB9 serial/contact-closure and slot for network management card options
- Compatible with 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 macOS
- USB & Serial ports enable data-saving unattended shutdown when used with PowerAlert software, available via FREE download from <a href="mailto:tripplite.eaton.com/products/power-alert">tripplite.eaton.com/products/power-alert</a>
- Built-in Emergency Power Off (EPO) interface with cable
- NEMA L5-30P input plug/NEMA 5-15/20R & NEMA 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 four 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
- Single line TEL/DSL or network ethernet line surge suppression
- \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only)

# **Specifications**

OVERVIEW		
UPC Code	037332125422	
UPS Type	On-Line	
INPUT		
Input Phase	Single-Phase	
Rated input current (Maximum Load)	24A	
Nominal Input Voltage(s) Supported	120V AC	



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
OUTPUT	
Output Capacity (VA)	3000
Output Capacity (kVA)	3
Output Capacity (Watts)	2400
,	2.4
Output Capacity (kW)	
Output Capacity Details	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	0.8
Crest Factor	3:1
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%
Load Management Receptacles	Two switchable four-outlet load banks, (bank 1 - four 5-15/20R, bank 2 - four 5-15R outlets)
Output Circuit Breakers	15A branch rated (x2) - each breaker protects 4 outlets, L5-30R is unbreakered
Output AC Waveform (AC Mode)	Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
Nominal Output Voltage(s) Supported	120V
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)
Runtime Full Load (min.)	12 min.
Runtime Half Load (min.)	30 min.
Expandable Runtime	Yes



External Battery Pack Compatibility	<a class="productLink" href="//tripplite.eaton.com/External-72V-2U-RackTower-Battery-Pack-for-Select-Tripp-Lite-UPS-Systems~BP72V15-2U">BP72V15-2U</a> (limit 1); BP72V28RT-3U (multi-pack compatible); <a class="productLink" href="//tripplite.eaton.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 6 hours from 10% to 80% (typical, full load discharge)	
Battery Access	Front panel battery access door	
Internal UPS Replacement Battery Cartridge	<a class="productLink" href="//tripplite.eaton.com/3U-UPS-Replacement-72VDC-Battery-Cartridge-1-set-6-select-Tripp-Lite-SmartOnline-UPS~RBC96-3U">RBC96-3U</a> (quantity 2)	
Battery Replacement Description	Hot-swappable, user replaceable batteries	
VOLTAGE REGULATION		
Voltage Regulation Description	Online, double-conversion power conditioning	
Overvoltage Correction	2% output voltage regulation during overvoltages to 150	
Undervoltage Correction	2% output voltage regulation during undervoltages to 80	
Severe Undervoltage Correction	2% output voltage regulation during undervoltages to 65 (under 70% load only)	
USER INTERFACE, ALERTS & CONTROLS		
Switches	2 Switches control off/on power status and alarm-cancel/self-test operation	
Alarm Cancel Operation	Power-fail alarm can be silenced using alarm-cancel switch	
Audible Alarm	Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions	
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	
SURGE / NOISE SUPPRESSION		
UPS AC Suppression Joule Rating	480	
UPS AC Suppression Response Time	Instantaneous	
UPS Dataline Suppression	1 line TEL/DSL (1 in / 1 out); 10/100Base T Ethernet	
EMI / RFI AC Noise Suppression	Yes	
PHYSICAL		
Primary Form Factor	Rackmount	
Rack Height	3U	
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="//tripplite.eaton.com/2-Post-Rack-Mount-Installation-Kit-3U-Larger-UPS-Transformer-Battery-Pack-Components~2POSTRMKITHD">2POSTRMKITHD</a> ); Tower ( <a class="productLink" href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2-9USTAND</a> )
Minimum Required Rack Depth (cm)	73.66
Minimum Required Rack Depth (inches)	29
Minimum Required Rack Depth with External Battery Pack (cm)	77
Minimum Required Rack Depth with External Battery Pack (in.)	30.25
Minimum Required Rack Depth without External Battery Pack (cm)	80
Minimum Required Rack Depth without External Battery Pack (in.)	31.5
Primary UPS Depth (mm)	660
Primary UPS Height (mm)	132
Primary UPS Width (mm)	452
Shipping Dimensions (hwd / in.)	11.50 x 23.00 x 33.00
Shipping Dimensions (hwd / cm)	29.21 x 58.42 x 83.82
Shipping Weight (lbs.)	150.00
Shipping Weight (kg)	68.04
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	13.21 x 45.21 x 66.04
UPS Power Module Dimensions (hwd, in.)	5.2 x 17.8 x 26
UPS Power Module Weight (kg)	50.48
UPS Power Module Weight (lbs.)	111.3
Unit Weight (lbs.)	111.3300
Unit Weight (kg)	50.50
ENVIRONMENTAL	
Operating Temperature Range	32° to 104°F (0° to 40°C)
Storage Temperature Range	5° to 122°F (-15° to 50°C)
Relative Humidity	0 to 95%, non-condensing
AC Mode BTU / Hr. (Full Load)	1117
AC Economy Mode BTU / Hr. (Full Load)	253
AC Mode Efficiency Rating (100% Load)	88%



AC Economy Mode Efficiency Rating (100% Load)	97%
Online Mode Heat Dissipation (BTU/Hr) @ Full Load	1117
Battery Mode Heat Dissipation (BTU/Hr) @ Full Load	1224
COMMUNICATIONS	
Network Management Cards	<a class="productLink" href="//tripplite.eaton.com/Web-Management-Accessory-Card-SmartPro-SmartOnline-UPS-Systems~TLNETCARD">TLNETCARD</a> ; <a class="productLink" href="//tripplite.eaton.com/Network-Card-Eaton-Tripp-Lite-Series-UPS-Systems~WEBCARDLXE">WEBCARDLXE</a> ; <a class="productLink" href="//tripplite.eaton.com/MODBUS-Management-Accessory-Card-UPS-Remote-Monitoring-Control~MODBUSCARD">MODBUSCARD</a> ; <a class="productLink" href="//tripplite.eaton.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; Economy-mode setting option is available using PowerAlert software and DB9 Serial cable connection OR via select Network Management Card options
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert software at https://tripplite.eaton.com/products/power-alert
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	No transfer time (0 ms.) in online, double-conversion mode
	No transfer time (0 ms.) in online, double-conversion mode  80V (100% load), 65V ( <70% load)
Transfer Time  Low Voltage Transfer to Battery	
Transfer Time  Low Voltage Transfer to Battery Power (Setpoint)  High Voltage Transfer to Battery	80V (100% load), 65V ( <70% load)
Transfer Time  Low Voltage Transfer to Battery Power (Setpoint)  High Voltage Transfer to Battery Power (Setpoint)	80V (100% load), 65V ( <70% load)
Transfer Time  Low Voltage Transfer to Battery Power (Setpoint)  High Voltage Transfer to Battery Power (Setpoint)  FEATURES & SPECIFICATIONS  Cold Start (Startup in Battery Mode	80V (100% load), 65V ( <70% load) 150
Transfer Time  Low Voltage Transfer to Battery Power (Setpoint)  High Voltage Transfer to Battery Power (Setpoint)  FEATURES & SPECIFICATIONS  Cold Start (Startup in Battery Mode During a Power Failure)	80V (100% load), 65V ( <70% load)  150  Cold-start operation supported  Auto Probe Monitoring and Reboot (requires WEBCARDLX); Automatic inverter bypass; Hot swappable batteries;
Transfer Time  Low Voltage Transfer to Battery Power (Setpoint)  High Voltage Transfer to Battery Power (Setpoint)  FEATURES & SPECIFICATIONS  Cold Start (Startup in Battery Mode During a Power Failure)  High Availability UPS Features	80V (100% load), 65V ( <70% load)  150  Cold-start operation supported  Auto Probe Monitoring and Reboot (requires WEBCARDLX); Automatic inverter bypass; Hot swappable batteries; Remote management; Surge/noise protection; Zero transfer time  High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy
Transfer Time  Low Voltage Transfer to Battery Power (Setpoint)  High Voltage Transfer to Battery Power (Setpoint)  FEATURES & SPECIFICATIONS  Cold Start (Startup in Battery Mode During a Power Failure)  High Availability UPS Features  Green Energy-Saving Features	80V (100% load), 65V ( <70% load)  150  Cold-start operation supported  Auto Probe Monitoring and Reboot (requires WEBCARDLX); Automatic inverter bypass; Hot swappable batteries; Remote management; Surge/noise protection; Zero transfer time  High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy
Transfer Time  Low Voltage Transfer to Battery Power (Setpoint)  High Voltage Transfer to Battery Power (Setpoint)  FEATURES & SPECIFICATIONS  Cold Start (Startup in Battery Mode During a Power Failure)  High Availability UPS Features  Green Energy-Saving Features  APPLICATIONS	80V (100% load), 65V (<70% load)  150  Cold-start operation supported  Auto Probe Monitoring and Reboot (requires WEBCARDLX); Automatic inverter bypass; Hot swappable batteries; Remote management; Surge/noise protection; Zero transfer time  High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy mode operation
Transfer Time  Low Voltage Transfer to Battery Power (Setpoint)  High Voltage Transfer to Battery Power (Setpoint)  FEATURES & SPECIFICATIONS  Cold Start (Startup in Battery Mode During a Power Failure)  High Availability UPS Features  Green Energy-Saving Features  APPLICATIONS  UPS Applications	80V (100% load), 65V (<70% load)  150  Cold-start operation supported  Auto Probe Monitoring and Reboot (requires WEBCARDLX); Automatic inverter bypass; Hot swappable batteries; Remote management; Surge/noise protection; Zero transfer time  High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy mode operation



WARRANTY & SUPPORT		
Product Warranty Period (Worldwide)	2-year limited warranty	
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 <a class="insuranceLink" href="//tripplite.eaton.com/support/insurance-policy">Ultimate Lifetime Insurance</a>	



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