

## SmartOnline 208/240 & 120V 8kVA 5.6kW Double-Conversion UPS, 4U Rack/Tower, Extended Run, Network Card Options, USB, DB9, Bypass Switch

MODEL NUMBER: SU8000RT4U



### Description

Tripp Lite 8kVA SmartOnline Hot-Swappable Modular Rack/Tower UPS offers 8000VA on-line, double-conversion UPS support for server, network and telecommunications equipment. Maintains battery-derived AC output during blackouts with active, full-time power conditioning. Fault-tolerant auto-bypass prevents unexpected service interruptions during overload or internal fault conditions. Single all-in-one housing installs in 4 rack spaces (4U). Upright tower and two post rackmount installation supported with optional accessories. Maintains full-time sine wave output within 3% of selectable 208/120 or 240/120V AC. Corrects brownouts and overvoltages from 65V to 140V (L-N). Expandable runtime with optional external battery packs. Converts raw input from AC to DC, then resynthesizes output power back to perfect sine wave AC output with enhanced protection from harmonic distortion, fast electrical impulses and other hard-to-solve power problems not addressed by other UPS types. Highly efficient operation in optional economy mode setting, saving BTU heat output and energy costs. Network-grade AC surge and noise suppression. Network management interfaces include combination DB9 RS-232 enabled and dry contact serial port, enhanced USB port and slot for network management card options. 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. PowerAlert monitoring software is available via free download. Supports Emergency Power Off (EPO) via built-in interface. Front panel LEDs and LCD readout with scroll controls support visual monitoring of all major UPS functions. LED/LCD display panel easily rotates for viewing in rackmount or tower configurations. Split phase 4 conductor hardwire input. UPS supported outlets include two L6-30R, two L6-20R and 4 low voltage 5-15/20R. Hardwire output is also supported. Hardwire connections and outlets are mounted on a detachable backplate with manual bypass switch to enable hot-swappable UPS replacement without powering off connected equipment. Internal batteries and optional external battery packs are field replaceable and hot swappable. Attractive all-black color scheme. \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only).

### Highlights

- 8kVA / 8000VA / 5600W on-line double-conversion 4U rack/tower UPS, Sine Wave
- Included maintenance bypass switch enables live replacement of UPS with zero downtime
- Extended runtime options, Interactive LCD interface
- USB, RS232 & EPO ports; Slot for network management card options
- 208/240V Hardwire 60Hz input (4 wire split phase); L6-30R, L6-20R (208/240V) & 5-15/20R (120V) outlets

### Package Includes

- SU8000RT4U Smart Online UPS
- SUPDM8K Detachable PDU with Manual Bypass Switch
- USB, DB9 and EPO cables
- 4 post rackmount installation brackets

## Features

- True online, double-conversion UPS provides pure, full-time sine wave AC output free of surges, voltage fluctuations and line noise
- 8000VA/5600 watt output power capacity with dual voltage output of 208/120 or 240/120V
- 4U all-in-one high power density housing supports rackmount installation in only 4 rack spaces
- Dual conversion UPS actively converts raw input from AC to DC, then back to perfect sine wave AC output with enhanced protection from harmonic distortion, fast electrical impulses and other hard-to-solve power problems not addressed by other UPS types
- Hardwire input/output connections and output receptacles are mounted on a detachable backplate with manual bypass switch to enable hot-swappable UPS replacement without powering off connected equipment
- Provides perfectly regulated, sine wave output power free of line noise, transient surges and frequency variation for the most efficient operation of critical servers, networking and telecommunications equipment
- Maintains output within 3% of selected 208/120 or 240/120V nominal voltage during brownouts and overvoltages
- Supports connected equipment during blackouts for 12/5 minutes at half/full load levels, runtime is further expandable with optional external battery packs
- Intelligent battery management system extends battery life
- Some external battery configurations require the use of Tripp Lite's External Battery Configuration Software (see manual)
- Network interfaces support simultaneous communications via DB9 port, USB port and slot for network management card options
- Compatible with Tripp Lite UPS management card options TLNETCARD, WEBCARDLX, SNMPWEBCARD, MODBUSCARD and RELAYIOCARD
- DB9 port supports RS-232 and dry contact messaging
- 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](http://www.tripplite.com/poweralert)
- Built-in Emergency Power Off (EPO) interface with cable
- Includes hardwire output and 8 output receptacles (2 L6-30R, 2 L6-20R, 4 NEMA 5-15/20R), all of which are available for simultaneous use
- Split phase, 4 conductor hardwire connection (featured on included detachable PDU).
- Front panel LEDs and LCD readout with scroll button enables visual confirmation of all major UPS functions and current site electrical conditions
- Front panel switches enable power on/off control, self-test and alarm cancel functions
- Included adjustable mounting rails support installation in 4 post 19 inch rack enclosures
- Optional 2-9USTAND set of tower stands supports upright tower installation



- Optional 2POSTRMKITHD accessory enables 2 post rackmount installation
- Fault tolerant electronic bypass maintains utility output during a variety of UPS fault conditions
- \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only)

## Specifications

OVERVIEW	
UPC Code	037332136558
UPS Type	On-Line
INPUT	
Rated input current (Maximum Load)	34A
Nominal Input Voltage(s) Supported	120/208V (Split phase L1,L2,N,G); 120/240V (Split phase L1,L2,N,G)
UPS Input Connection Type	Hardwire
UPS Input Connection Description	4 wire split-phase input (L1, L2, N, G)
Recommended Electrical Service	40A 208/120V or 240/120V Split Phase
Input Phase	Single-Phase
OUTPUT	
Output Volt Amp Capacity (VA)	8000
Output kVA Capacity (kVA)	8
Output Watt Capacity (Watts)	5600
Output kW Capacity (kW)	5.6
Output Capacity Details	8,000VA / 5600W (240V), 7200VA / 5600W (208V); Supports up to 105% load continuously in double conversion mode, 106 to 125% for 3 minutes, 126 to 150% for 30 seconds; Loads over 150% trigger immediate bypass mode operation to support equipment directly from mains power; Double conversion mode is automatically restored as the overload is cleared
Power Factor	0.7
Crest Factor	3:1
Nominal Voltage Details	240/120V or 208/120V split phase output
Frequency Compatibility	60 Hz
Frequency Compatibility Details	Output frequency regulation +/- 0.05Hz (free running)
Output Voltage Regulation (Line Mode)	+/- 3%
Output Voltage Regulation (Economy Line Mode)	+/- 10%
Output Voltage Regulation (Battery Mode)	+/- 3%
Output Receptacle Details	Supports 208/120V or 240/120V hardwire output (L1, L2, N, G)



Output Circuit Breakers	20A branch rated breakers (x4) protect 1 5-15/20R outlet each, 20A double pole breakers (x2) protect one L6-20R each, L6-30R outlets are unbreakered
Output AC Waveform (AC Mode)	Pure Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
Nominal Output Voltage(s) Supported	120V; 208V; 240V
Output Receptacles	(4) 5-15/20R; (2) L6-20R; (2) L6-30R; Hardwire
Individually Controllable Load Banks	No
<b>BATTERY</b>	
Battery Type	Valve Regulated Lead Acid (VRLA)
Full Load Runtime (min.)	5 min. (5600w)
Half Load Runtime (min.)	12 min. (2800w)
Expandable Battery Runtime	Supports extended runtime with optional external battery packs
Expandable Runtime	Yes
External Battery Pack Compatibility	<a href="http://www.tripplite.com/External-192V-3U-Rack-Tower-Battery-Pack-select-Tripp-Lite-UPS-Systems~BP192V12-3U">BP192V12-3U</a> & <a href="http://www.tripplite.com/External-192V-2U-Rackmount-Battery-Pack-UPS-Systems~BP192V5RT2U">BP192V5RT2U</a> (limit 1); & <a href="http://www.tripplite.com/external-192v-tower-battery-pack-for-select-tripp-lite-UPS-systems-su5000rt4u-su6000rt4u-su8000rt4u~BP192V787C-1PH">BP192V787C-1PH</a>
DC System Voltage (VDC)	192
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 href="http://www.tripplite.com/UPS-Replacement-192VDC-Battery-Cartridge-Kit-2-sets-of-8-for-select-Tripp-Lite-SmartOnline-UPS~RBC9-192">RBC9-192</a>
Battery Replacement Description	Hot-swappable, user replaceable batteries
<b>VOLTAGE REGULATION</b>	
Voltage Regulation Description	Online, double-conversion power conditioning
Overvoltage Correction	Corrects overvoltages to 140 (measured L1-N : L2-N)
Undervoltage Correction	Corrects undervoltages to 65 (measured L1-N : L2-N)
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	
Front Panel LCD Display	Selectable LCD display with scroll and selection buttons enables UPS control and detailed monitoring options; LED/LCD panel rotates for viewing in rack/tower formats
Switches	Includes main power off/on switch, plus 2 switches to set and execute scrollable LCD functions. A manual bypass switch featured on the detachable PDU allows for complete removal of the UPS during routine maintenance without disrupting output power
Alarm Cancel Operation	Alarm cancel switch
Audible Alarm	Unique audible alarms for all major UPS, environmental and power conditions (see manual)



LED Indicators	6 LEDs indicate line power, online mode, economy/bypass mode, on-battery, charger and AC output status; LCD screen offers additional information and control options
<b>SURGE / NOISE SUPPRESSION</b>	
UPS AC Suppression Joule Rating	1810
UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
AC Suppression Response Time	Instantaneous
<b>PHYSICAL</b>	
Cooling Method	Fans
Included Mounting Accessory Description	4 post rackmount installation accessories included
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount
Installation Form Factors Supported with Optional Accessories	2 post rackmount ( <a href="http://www.tripplite.com/2-Post-Rack-Mount-Installation-Kit-3U-Larger-UPS-Transformer-Battery-Pack-Components~2POSTRMKITHD">2-Post-Rack-Mount-Installation-Kit-3U-Larger-UPS-Transformer-Battery-Pack-Components~2POSTRMKITHD</a> ); Tower ( <a href="http://www.tripplite.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND</a> )
Maximum Device Depth (cm)	82.80
Maximum Device Depth (in.)	32.6
Maximum Device Depth (mm)	828
Minimum Required Rack Depth with External Battery Pack (cm)	103
Minimum Required Rack Depth with External Battery Pack (in.)	40.6
Minimum Required Rack Depth without External Battery Pack (cm)	96
Minimum Required Rack Depth without External Battery Pack (in.)	37.6
Primary Form Factor	Rackmount
Primary UPS Depth (mm)	828
Primary UPS Height (mm)	178
Primary UPS Width (mm)	445
Rack Height	4U
Shipping Dimensions (hwd / cm)	31.75 x 99.06 x 59.69
Shipping Dimensions (hwd / in.)	12.50 x 39.00 x 23.50
Shipping Weight (kg)	101.60
Shipping Weight (lbs.)	224.00
Unit Dimension Details	Includes 4U UPS/power module plus SUPDM8K detachable PDU with bypass; MAXIMUM DEVICE DEPTH specification refers to the whole UPS installed depth with bypass PDU installed



UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	17.78 x 44.45 x 82.80
UPS Power Module Dimensions (hwd, in.)	7 x 17.5 x 32.6
UPS Power Module Weight (kg)	80.29
UPS Power Module Weight (lbs.)	177
<b>ENVIRONMENTAL</b>	
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)	2362
AC Economy Mode BTU / Hr. (Full Load)	1219
Battery Mode BTU / Hr. (Full Load)	1887
AC Economy Mode Efficiency Rating (100% Load)	94%
Operating Elevation (ft.)	0-3000m (0 to 10,000 ft.)
Audible Noise	60 dBA at front side 1 meter
Operating Elevation (m)	0-3000 m
<b>COMMUNICATIONS</b>	
Network Management Cards	&nbsp;<a class="productLink" href="//www.tripplite.com/SNMP-Web-Management-Accessory-Card-SmartPro-SmartOnline-UPS-Systems~SNMPWEBCARD">SNMPWEBCARD</a>&nbsp;; &nbsp;<a class="productLink" href="//www.tripplite.com/Web-Management-Accessory-Card-SmartPro-SmartOnline-UPS-Systems~TLNETCARD">TLNETCARD</a>&nbsp;; &nbsp;<a class="productLink" href="//www.tripplite.com/Web-Management-Accessory-Card~WEBCARDLX">WEBCARDLX</a>&nbsp;; &nbsp;<a class="productLink" href="//www.tripplite.com/MODBUS-Management-Accessory-Card-UPS-Remote-Monitoring-Control~MODBUSCARD">MODBUSCARD</a>&nbsp;; &nbsp;<a class="productLink" href="//www.tripplite.com/Programmable-Relay-I-O-Card~RELAYIOCARD">RELAYIOCARD</a>&nbsp;;
Network Monitoring Port Description	RS232 and contact closure communications are supported on one DB9 port
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert Local software at <a href="https://www.tripplite.com/poweralert">https://www.tripplite.com/poweralert</a>
Communications Cable	USB and DB9 cabling included
Communications Interface	Contact closure; DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface; USB (HID enabled)
<b>LINE / BATTERY TRANSFER</b>	
Transfer Time	No transfer time (0 ms.) in online, double-conversion mode
Low Voltage Transfer to Battery Power (Setpoint)	65V (L1-N:L2-N)
High Voltage Transfer to Battery Power (Setpoint)	140V (L1-N:L2-N)





<b>SPECIAL FEATURES</b>	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
High Availability UPS Features	Auto Probe Monitoring (requires WEBCARDLX); Automatic inverter bypass; Expandable battery backup; Hot swappable batteries; Hot swappable UPS power module; Manual bypass switch; On-Line/Double-Conversion; Remote management; Sine wave output; Zero transfer time
Green Energy-Saving Features	High efficiency economy mode operation; Schedulable daily hours of economy mode operation
<b>STANDARDS &amp; COMPLIANCE</b>	
UPS Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Tested to NOM (Mexico); Meets FCC Part 15 Category A (EMI)
<b>WARRANTY</b>	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000&nbsp;<a class="insuranceLink" href="//www.tripplite.com/support/insurance-policy">Ultimate Lifetime Insurance</a>&nbsp;

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