



# SmartOnline 240/208/120V 8kVA 5.6kW On-Line Double-Conversion UPS, Extended Run, SNMP, Webcard, 4U Rack/Tower, Split-Phase input, 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

#### **Highlights**

- 8000VA / 8kVA / 5600W on-line double-conversion UPS
- 208/120V or 240/120V +/-3% output at 60Hz
- Included maintenance bypass switch enables live replacement of UPS with zero downtime
- 4U Rack/Tower compatible, Hot-swap power and battery modules
- USB, RS232 & EPO ports, support for SNMP/WEB card options
- Front panel LEDs with detailed LCD monitoring and control screen
- Expandable runtime with optional external battery packs
- Hardwire input (4 wire), L6-30R, L6-20R, 5-15/20R & Hardwire outputs

#### **Package Includes**

- SU8000RT4U Smart Online UPS
- SUPDM8K Detachable PDU with Manual Bypass Switch
- PowerAlert software and complete cabling
- 4 post rackmount installation brackets

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 SNMPWEBCARD slot. 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. 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).

#### **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
- 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 SNMPWEBCARD slot. 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.
- Included PowerAlert UPS monitoring software supports safe unattended shutdown, monitoring and control via local connected servers, plus any number of additional servers over IP
- Communications ports support 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 and output power control
- 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**

SELECTOR		
Selector Type	UPS SYSTEMS	
General Info		
Product Group	UPS SYSTEMS	
TAA Compliant	No	
OVERVIEW		
UPS Family	SmartOnline	
UPS Type	On-Line On-Line	
OUTPUT		



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
Output Volt Amp Capacity (VA)	8000
Output kVA Capacity (kVA)	8
Output Watt Capacity (Watts)	5600
Output kW Capacity (kW)	5.6
Power Factor	0.7
Crest Factor	3:1
Nominal Output Voltage(s) Supported	120V; 208V; 240V
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 Receptacles	(4) 5-15/20R; (2) L6-20R; (2) L6-30R; Hardwire
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
INPUT	
Rated input current (Maximum Load)	34A
Nominal Input Voltage(s) Supported	208V AC / 120V AC (4 wire split single phase); 240V AC /120V AC (4 wire split single phase)
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
BATTERY	
Full Load Runtime (min.)	5 min. (5600w)
Half Load Runtime (min.)	12 min. (2800w)





Primary Form Factor	Rackmount
Installation Form Factors Supported with Optional Accessories	2 post rackmount (2POSTRMKITHD); Tower (2-9USTAND)
Included Mounting Accessory Description	4 post rackmount installation accessories included
PHYSICAL	
AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
UPS AC Suppression Response Time	Instantaneous
SURGE / NOISE SUPPRESSION	
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)
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
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
LEDS ALARMS & SWITCHES	
Undervoltage Correction	Corrects undervoltages to 65 (measured L1-N : L2-N)
Overvoltage Correction	Corrects overvoltages to 140 (measured L1-N : L2-N)
Voltage Regulation Description	Online, double-conversion power conditioning
VOLTAGE REGULATION	
Expandable Runtime	Yes
Battery Replacement Description	Hot-swappable, user replaceable batteries
Battery Access	Front panel battery access door
Internal UPS Replacement Battery Cartridge	RBC9-192
Battery Recharge Rate (Included Batteries)	Less than 6 hours from 10% to 80% (typical, full load discharge)
DC System Voltage (VDC)	192
External Battery Pack Compatibility	BP192V1037C-1PH; BP192V12-3U; BP192V1407C-1PH; BP192V557C-1PH; BP192V787C-1PH; BP192V5RT2U (limit 1)
Expandable Battery Runtime	Supports extended runtime with optional external battery packs



UPS Power Module Dimensions (hwd, in.)	7 x 17.5 x 32.6
UPS Power Module Dimensions (hwd, cm)	17.8 x 44.4 x 82.7
Installed Whole System Maximum Rack Depth (in.)	32.6
Installed Whole System Maximum Rack Depth (cm)	82.7
Rack Height (U Spaces)	4
UPS Power Module Weight (lbs.)	177
UPS Power Module Weight (kg)	80.4
UPS Dimensions Details	Installed Whole System Maximum Rack Depth refers to the installed depth with the included Bypass PDU attached to the UPS power module
UPS Shipping Dimensions (hwd / in.)	13 x 23 x 37
UPS Shipping Dimensions (hwd / cm)	33 x 58.4 x 94
Shipping Weight (lbs.)	212
Shipping Weight (kg)	96.2
Cooling Method	Fans
UPS Housing Material	Steel
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)	2353.3
AC Mode Efficiency Rating (100% Load)	89%
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
COMMUNICATIONS	
Communications Interface	USB (HID enabled); DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface
Network Monitoring Port Description	RS232 and contact closure communications are supported on one DB9 port
PowerAlert Software	Included
Communications Cable	USB and DB9 cabling included
LINE / BATTERY TRANSFER	



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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)		
SPECIAL FEATURES			
US & Canada Only Flag	0		
KVM Demo Flag	0		
Console Server Demo Flag	0		
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported		
High Availability UPS Features	Automatic inverter bypass; Manual bypass switch; Detachable hot-swap PDU; Hot swappable UPS power module; Hot swappable batteries		
Green Energy-Saving Features	High efficiency economy mode operation; Schedulable daily hours of economy mode operation		
CERTIFICATIONS			
UPS Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Tested to NOM (Mexico); Meets FCC Part 15 Category A (EMI)		
WARRANTY			
Product Warranty Period (Worldwide)	2-year limited warranty		
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 Ultimate Lifetime Insurance		
APPLICATIONS			
UPS Applications	Network/Server; Hot-Swap; Eco Energy-Saving		
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