

# Model #: SU8000RT3U1TF

# SmartOnline 8kVA On-Line Double-Conversion UPS, 8U Rack/Tower, 208/120V NEMA outlets



### **Highlights**

- 8kVA / 8000VA / 7200 watt on-line double-conversion 8U rack/tower UPS with 0.9 output power factor
- 208/120V +/-2% output at 60Hz, high efficiency economy mode option
- Hot-swappable power and battery modules
- USB, RS232 & EPO ports; support for SNMP/WEB and contact-closure card options
- Front panel LEDs with detailed LCD monitoring and control screen
- Expandable runtime with optional external battery packs
- Hardwire input (3 wire); L6-30R, L6-20R & 5-15/20R outlets

### **Description**

Tripp Lite SU8000RT3U1TF 8000VA / 8kVA / 7200 watt online, double-conversion UPS system offers complete power protection for critical network applications. This system delivers online, double-conversion UPS protection with zero transfer time, suitable for advanced networking applications. Fault-tolerant auto-bypass prevents unexpected service interruptions during UPS overload or internal fault conditions. Included detachable PDU with manual bypass switch enables hot-swappable replacement of entire UPS power module with no interruption to connected equipment. Enhanced availability, fault tolerance and simple hot-swap replacement options make this UPS ideal for advanced networking applications in data centers, computer rooms, network closets and rugged industrial locations.

#### Package Includes

- SU8000RT3UPM 3U UPS power module
- BP240V10RT3U external battery pack
- SU5000XFMRT2U step down transformer
- SUPDMB710 Detachable PDU with manual bypass switch
- Four post compatible rack rail kit (3 sets)
- Tower stands for upright tower configuration
- PowerAlert software, complete data cabling and user manual

### **Features**

- Tripp Lite SU8000RT3U1TF 8kVA / 8000VA / 7200 watt on-line, double-conversion UPS system in 8U total rack/tower configuration (3U UPS power module, 3U external battery pack and 2U step-down transformer)
- Detachable PDU with manual bypass switch enables hot-swappable UPS power module replacement with no interruption in output power to connected networking equipment
- Fault tolerant electronic bypass maintains utility output during a variety of UPS fault conditions
- Hardwire input; 2 L6-30R, 4 L6-20R and 12 5-15/20R outlets
- Maximum installed rack depth of only 32.5 in. / 82.6cm inches
- Full-time active power conditioning provides clean, continuous dual-conversion AC output free of voltage fluctuations, power interruptions and line noise
- Double-conversion operation converts raw input from AC to DC, then resynthesizes output power back to perfect sine wave AC with enhanced protection from harmonic distortion, fast electrical impulses and other hard-to-solve power problems not addressed by other UPS

types

- Maintains full-time sine wave output within 2% of 208/120V nominal at 60Hz during brownouts as low as 100V and overvoltages as high as 300V
- Expandable runtime is supported with optional BP240V10RT3U; BP240V557C-1PH; BP240V787C-1PH; BP240V1037C-1PH; BP240V10037C-1PH; BP240V100
- Highly efficient operation in optional economy mode significantly reduces BTU heat output and operating energy costs
- Battery independent restart ensures automatic UPS power-up without user interaction after lengthy power outages, even when batteries are expired and require replacement
- PowerAlert monitoring software offers detailed site power and UPS updates with support for safe auto-shutdown of connected systems as UPS batteries become depleted
- Includes Free PowerAlert monitoring software packages; PowerAlert LOCAL for desktops and small business networks, PowerAlert NSA (Network Shutdown Agent) for larger networks and PowerAlert NMS (Network Management System) for monitoring up to 250 SNMP-enabled UPS, PDU and other networking devices
- Supports detailed monitoring of equipment load levels, self-test data and utility power conditions via built-in RS-232 and USB interfaces
- HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X
- Optional SNMPWEBCARD offers communications and control via secure remote web and network interfaces
- Optional RELAYIOCARD supports six configurable hard contact closure outputs for custom event notification
- Optional RELAYIOMINI interface module offers three configurable hard contact closure outputs for custom event notification (requires removal of USB interface module)
- Supports Emergency Power Off (EPO) via built-in interface
- Included rail kit supports 8U 19 inch rackmount installation in 4 post racks
- Optional 2POSTRMKITHD supports installation in 2 post 19 inch racks
- Optional 2-9USTAND supports upright tower placement
- Front panel LEDs and LCD readout with scroll controls and password option supports visual monitoring of all major UPS functions and advanced UPS settings for charge level, nominal voltage selection, frequency conversion and other operational parameters
- . LED / LCD display panel rotates for viewing in rackmount or tower configurations
- Network-grade AC surge and noise suppression
- Industrial mode option (factory preset) enables supports high current startup loads by momentarily switching to bypass mode in response to short duration overload conditions
- External battery packs are field replaceable and hot swappable

### **Specifications**

OUTPUT			
Output Volt Amp Capacity (VA)	8000		
Output kVA capacity (kVA)	8		
Output Watt Capacity (watts)	7200		
Output kW capacity	7.2		
Output power factor	0.9		
Output Capacity Details	Supports up to 105% load continuously in double conversion mode, 106 to 125% for 1 minute, 126% to 150% for 30 seconds; Loads over 150% trigger immediate bypass mode operation to support loads directly from mains power; Double conversion mode is automatically restored as load levels are reduced to 95% or less		
Nominal Output Voltage(s) Supported	120V; 208V		
Nominal Voltage details	7200 watts total output supported; 5000 watts maximum 120V output; add 1 additional SU5000XFMRT2U transformer for full load 120V operation		
Frequency compatibility	60 Hz		
Frequency compatibility details	Output frequency regulation +/- 0.05Hz (free running)		

Output voltage regulation (line mode)	+/- 2%			
Output voltage regulation (Economy line mode)	+/- 10%			
Output voltage regulation (Battery mode)	+/- 2%			
Built-in UPS output receptacles	12 5-15/20R outlet(s); 4 L6-20R outlet(s); 2 L6-30R outlet(s)			
Output circuit breaker	20A double-pole (x2) protects 2 L6-20R outlets each, 30A double-pole (x2) protects 1 L6-30R outlets each, 20A single-pole (x4) protect 3 5-15/20R outlets each			
Output AC waveform (AC mode)	Pure Sine wave			
Output AC waveform (battery mode)	Pure Sine wave			
INPUT				
Rated input current (at maximum load)	44.2A (208V)			
Nominal Input Voltage(s) Supported	208V AC			
UPS input connection type	Hardwire			
UPS input connection description	3 wire single phase input (L1, L2, G)			
Recommended Electrical Service	208V 50A			
BATTERY				
Full load runtime (minutes)	5.5 min. (7200w)			
Half load runtime (minutes)	13.5 min. (3600w)			
Expandable battery runtime	Supports extended runtime with optional external battery packs			
External battery pack compatibility	BP240V10RT3U; BP240V557C-1PH; BP240V787C-1PH; BP240V1037C-1PH; BP240V1407C-1PH			
DC system voltage (VDC)	240			
Battery recharge rate (included batteries)	Less than 6 hours from 10% to 90%			
Battery replacement description	Hot-swappable, user replaceable external battery packs			
VOLTAGE REGULATIO	DN			
Voltage regulation description	2% output voltage regulation in standard online, double-conversion mode			
Overvoltage correction	Corrects overvoltages up to 300V			

correction					
LEDS ALARMS & SWI	TCHES				
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				
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; LCD Display supports ENGLISH, FRENCH, GERMAN, ITALIAN, SPANISH and PORTUGUESE (see manual)				
Alarms	Unique audible alarms for all major UPS, environmental and power conditions (see manual)				
Alarm cancel operation	Alarm cancel switch				
Switches	2 Switches control off/on power status and alarm-cancel/self-test operation; 2 additional switches support set and execute scrolling LCD functions; bundled PDU includes bypass switch to enable hot-swap UPS power module replacement				
SURGE / NOISE SUPP	RESSION				
UPS AC suppression response time	Instantaneous				
EMI / RFI AC noise suppression	Yes				
ISOLATION					
Output isolation transformer	120V output is isolation transformer protected				
PHYSICAL					
Installation form factors supported with included accessories	Tower				
Included mounting accessory description	3 sets of adjustable 4 post rack rails included; 2-9USTAND tower kit included (supports up to 9U in tower format)				
Installation form factors supported with optional accessories	2 post rackmount (2POSTRMKITHD)				
Optional mounting accessory notes	3 sets of 2POSTRMKITHD required for 2 post rackmount installation of separate power module, battery pack and transformer				
Primary form factor	Rackmount				
UPS / Power Module dimensions in primary form factor (height x width x depth / inches)	5.14 x 17.5 x 25.82				
UPS / Power Module dimensions in primary form factor (height x width x depth / cm)	13.1 x 44.4 x 65.6				
Installed whole system maximum rack depth (inches)	32.5				

Installed whole system maximum rack depth (cm)	82.6
Installed whole system total rack space height (rack spaces)	8U
Secondary form factor	Tower
UPS / Power Module weight (lbs)	43
UPS / Power Module weight (kg)	19.5
Stepdown transformer dimensions (height x width x depth / inches)	3.5 x 17.5 x 20.8
Stepdown transformer dimensions (height x width x depth / cm)	8.9 x 44.4 x 63.5
Stepdown transformer weight (Ibs)	57
Stepdown transformer weight (kg)	25.9
Included battery pack dimensions (height x width x depth / inches)	5.25 x 17.5 x 25
Included battery pack dimensions (height x width x depth / cm)	13.3 x 44.4 x 63.5
Included battery pack weight (lbs)	158.7
Included battery pack weight (kg)	72
UPS Shipping dimensions (height x width x depth / inches)	49.25 x 23 x 31.5
UPS Shipping dimensions (height x width x depth / cm)	125.1 x 58.4 x 80
Shipping weight (lbs)	402.2
Shipping weight (kg)	182.6
UPS housing material	Steel
Cooling method	Fan
ENVIRONMENTAL	

<b>UPS</b> Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Tested to NOM (Mexico); Meets FCC Part 15 Category A (EMI)			
CERTIFICATIONS				
Green & high efficiency features	High efficiency economy mode operation; Schedulable daily hours of economy mode operation			
High availability UPS features	Automatic inverter bypass; Manual bypass switch; Detachable hot-swap PDU; Hot swappable UPS power module; Hot swappable batteries			
Economy mode operation	Optional economy mode enables high-efficiency bypass operation with a maximum output voltage variation of +/-10%. Double conversion mode is automatically restored as mains voltage varies beyond +/-10% with less than 1 millisecond transfer time between modes.			
Cold Start (startup in battery mode during a power failure)	Cold-start operation supported			
SPECIAL FEATURES				
High voltage transfer to battery power (setpoint)	300V			
Low voltage transfer to battery power (setpoint)	100V			
Transfer time (economy mode)	8 ms. typical power failure response in optional economy mode			
Transfer time	No transfer time (0 ms.) in online, double-conversion mode			
LINE / BATTERY TRAN	ISFER			
WatchDog compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications			
Communications cable	USB, DB9 serial and EPO cables included			
PowerAlert software	Included			
Network monitoring port description	Additional contact closure support with optional RELAYIOCARD and RELAYIOMINI interface cards. RELAYIOMINI installation requires removal of panel containing USB ports			
Communications interface	USB (HID enabled); DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface			
COMMUNICATIONS				
Audible Noise	60 dBA at front side 1 meter			
Operating Elevation (ft)	0-3000m (0 to 10,000 ft.)			
AC economy mode efficiency rating (100% load)	96%			
AC economy mode BTU / hr. (full load)	020			
AC mode BTU / hr. (full load)	732			
Relative Humidity	0 to 95%, non-condensing			
Storage Temperature Range	+5 to +122 degrees Fahrenheit / -15 to +50 degrees Celsius			
Operating Temperature Range	+32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius			

details		
WARRANTY		
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 Ultimate Lifetime Insurance	

## **Related Items**

**Optional Products** 

Product Type	Related Model	Description	Qty.
SNMP Accessories	SNMPWEBCARD	For remote monitoring and control via SNMP, Web, or Telnet.	-
SNMP Accessories	ENVIROSENSE	Monitors temperature, humidity and contact-closure inputs. (Requires SNMPWEBCARD or switched PDU.)	-
UPS Accessories	RELAYIOCARD	Programmable Relay I/O Card	-
UPS Accessories	MODBUSCARD	For remote monitoring and control via MODBUS protocol	-
UPS Accessories	RELAYIOMINI	3 Relay I/O Mini-module	-
Rackmount/Wallmount Kits	2POSTRMKITHD	Enables 2-Post Rackmount Installation of 3U and Larger UPS, Transformer and Battery Pack Components	-
External Battery Packs	BP240V10RT3U	External Battery Pack and Cable. 3U, Expandable, Black 3-Point Connector	-
External Battery Packs	BP240V557C-1PH	External battery pack for use with select Tripp Lite UPS Systems	-
External Battery Packs	BP240V787C-1PH	External battery pack for use with select Tripp Lite UPS Systems	-
External Battery Packs	BP240V1037C-1PH	External battery pack for use with select Tripp Lite UPS Systems	-
External Battery Packs	BP240V1407C-1PH	External battery pack for use with select Tripp Lite UPS Systems	-
Extended Warranties	WEXT3-SU8000	3-Year Extended Warranty - For SU8000 models	-
Extended Warranties	WEXT5-SU8000	5-Year Extended Warranty - For SU8000 models	-
Power Distribution	PDUV30HV	Basic 0U Vertical Rack PDU - Power Distribution Unit for Network Applications	-
Power Distribution	PDUMV20HV	Metered 0U Vertical Rack PDU - Metered Power Distribution Unit for Network Applications	-
Power Distribution	PDUMV30HV	Metered 0U Vertical Rack PDU - Metered Power Distribution Unit for Network Applications	-
Power Distribution	PDUMNV20HV	Monitored PDU / Power Distribution Unit supports real-time remote monitoring of load level, voltage and frequency with options for remote environmental and security monitoring	-
Power Distribution	PDUMNV30HV	Monitored PDU / Power Distribution Unit supports real-time remote monitoring of load level, voltage and frequency with options for remote environmental and security monitoring	-
Power Distribution	PDUMV20HVNET	Switched, Metered PDU with Remote Monitoring - 0U Vertical Rackmount Power Distribution Unit for Networks with Individually Switchable Outlets, Current Metering, Remote Monitoring and Control	-
Rackmount Power Distribution Unit for Networks with Indivi		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 Cables	P041-001-2	1-ft. 10AWG Heavy Duty Power Splitter Cable (NEMA L6-30P to 2x NEMA L6-30R)	-
Power Cables	P011-006	6-ft. Heavy-Duty 14AWG Power cord (IEC-320-C13 to NEMA L6-20P)	-

Power Cables	P040-010	10-ft. 12AWG Heavy Duty Power cord (IEC-320-C19 to IEC-320-L6-20P)	-
Power Cables	P039-001-2	1-ft. 10AWG Heavy Duty Power Splitter Cord (NEMA L6-20P to 2x NEMA L6-20R)	-
Power Cables	P044-06I	6-inch 12AWG Heavy Duty Power Adapter cord (NEMA-L5-20R to NEMA-5-20P)	-
Power Cables	P034-010	10-ft. 14AWG Heavy Duty Power cord (IEC-320-C19 to NEMA 5-15P)	-
Power Cables	P007-010	10-ft. Heavy-Duty 14AWG Power cord (IEC-320-C13 to NEMA 5-15P)	-

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=3552.

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