

Tripp Lite

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

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

## MODEL NUMBER: SU8000RT3U1TF







### **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.

#### **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 re-synthesizes 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; BP240V1407C-1PH
  external battery packs
- Some external battery configurations require the use of Tripp Lite's External Battery Configuration Software (see manual)

### **Highlights**

- 8kVA / 8000VA / 7200W on-line double-conversion UPS, 0.9 output power factor
- 208/120V +/-2% output at 60Hz, High efficiency economy mode option
- 8U Rack/Tower compatible,
   Hot-swap power and battery
   modules
- USB, RS232, EPO ports, Support for SNMP/WEB and other 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

### 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

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- · 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
Phase	Single-Phase
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 REGULATION	
Voltage regulation description	2% output voltage regulation in standard online, double-conversion mode
Overvoltage correction	Corrects overvoltages up to 300V
Undervoltage correction	Corrects undervoltages as low as 100V
LEDS ALARMS & SWITCHES	
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
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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 SUPPRESSION	
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
Rack Height	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 (lbs)	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
Cooling method	Fan
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)	2732
AC economy mode BTU / hr. (full load)	1020
AC mode efficiency rating (100% load)	91%
AC economy mode efficiency rating (100% load)	96%
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; EPO (emergency power off); Slot for SNMP/Web interface
Network monitoring port description	Additional contact closure support with optional RELAYIOCARD and RELAYIOMINI interface cards. RELAYIOMINI installation requires removal of panel containing USB ports
PowerAlert software	Included
Communications cable	USB, DB9 serial and EPO cables included
WatchDog compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications



LINE / BATTERY TRANSFER	
Transfer time	No transfer time (0 ms.) in online, double-conversion mode
Transfer time (economy mode)	8 ms. typical power failure response in optional economy mode
Low voltage transfer to battery power (setpoint)	100V
High voltage transfer to battery power (setpoint)	300V
SPECIAL FEATURES	
Cold Start (startup in battery mode during a power failure)	Cold-start operation supported
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.
High availability UPS features	Automatic inverter bypass; Manual bypass switch; Detachable hot-swap PDU; Hot swappable UPS power module; Hot swappable batteries
Green & high efficiency 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)
UPS Certification details	IEC 61000-4-5 1995 B Surge Immunity
WARRANTY	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 Ultimate Lifetime Insurance

# **Related Items**

# **Optional Products**

Model Number	Description	Qty.
SNMPWEBCARD	For remote monitoring and control via SNMP, Web, or Telnet.	1
ENVIROSENSE	Monitors temperature, humidity and contact-closure inputs. (Requires SNMPWEBCARD or switched PDU.)	1
RELAYIOCARD	Programmable Relay I/O Card	1
MODBUSCARD	For remote monitoring and control via MODBUS protocol	1
RELAYIOMINI	3 Relay I/O Mini-module	1
2POSTRMKITHD	Enables 2-Post Rackmount Installation of 3U and Larger UPS, Transformer and Battery Pack Components	1
BP240V10RT3U	External Battery Pack and Cable. 3U, Expandable, Black 3-Point Connector	1





BP240V557C-1PH	External battery pack for use with select Tripp Lite UPS Systems	1
BP240V787C-1PH	External battery pack for use with select Tripp Lite UPS Systems	1
BP240V1037C-1PH	External battery pack for use with select Tripp Lite UPS Systems	1
BP240V1407C-1PH	External battery pack for use with select Tripp Lite UPS Systems	1
WEXT3-SU8000	3-Year Extended Warranty - For SU8000 models	1
WEXT5-SU8000	5-Year Extended Warranty - For SU8000 models	1
PDUV30HV	Basic 0U Vertical Rack PDU - Power Distribution Unit for Network Applications	1
PDUMV20HV	Metered 0U Vertical Rack PDU - Metered Power Distribution Unit for Network Applications	1
PDUMV30HV	Metered 0U Vertical Rack PDU - Metered Power Distribution Unit for Network Applications	1
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	1
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	1
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	1
PDUMV30HVNET	Switched, Metered PDU with Remote Monitoring - 0U Vertical Rackmount Power Distribution Unit for Networks with Individually Switchable Outlets, Current Metering, Remote Monitoring and Control	1
P041-001-2	1-ft. 10AWG Heavy Duty Power Splitter Cable (NEMA L6-30P to 2x NEMA L6-30R)	1
P011-006	6-ft. Heavy-Duty 14AWG Power cord (IEC-320-C13 to NEMA L6-20P)	1
P040-010	10-ft. 12AWG Heavy Duty Power cord (IEC-320-C19 to IEC-320-L6-20P)	1
P039-001-2	1-ft. 10AWG Heavy Duty Power Splitter Cord (NEMA L6-20P to 2x NEMA L6-20R)	1
P044-06I	6-inch 12AWG Heavy Duty Power Adapter cord (NEMA-L5-20R to NEMA-5-20P)	1
P034-010	10-ft. 14AWG Heavy Duty Power cord ( IEC-320-C19 to NEMA 5-15P)	1
P007-010	10-ft. Heavy-Duty 14AWG Power cord (IEC-320-C13 to NEMA 5-15P)	1
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More information, including related products, owner's manuals, and additional technical specifications, can be found online at: http://www.tripplite.com/sku/SU8000RT3U1TF.

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