

# SmartOnline 120/208/240V 6kVA On-Line UPS – Double Conversion, 5.4kW, 6U, Network Card Option, TAA Compliant

MODEL NUMBER: SU6000RT4UTFTAA







6kVA UPS protects low- and high-voltage equipment against damage from blackouts, brownouts, surges and line noise.

#### **Features**

Protects Mission-Critical Rack-Mounted Equipment against Damage, Downtime and Data LossThis TAA-compliant UPS system protects connected equipment against damage, downtime and data loss due to power outages, voltage fluctuations and transient surges. Featuring a 5400W capacity, high 0.9 power factor, true on-line operation with pure sine wave output and zero transfer time to battery, the SmartOnline® SU6000RT4UTFTAA provides the highest level of battery backup and AC power protection for critical server, network and telecom equipment. Using the 2U transformer, this 6kVA UPS system can support both low- and high-voltage equipment.

Reliable, Expandable Battery BackupUPS battery backup keeps connected equipment operational through short power failures, and provides time to save data and perform an orderly system shutdown in case of a prolonged blackout. The internal battery set provides 8.5 minutes of support at half load and two minutes at full load. During normal operation, incoming utility power keeps the battery fully charged so backup power will be available when needed. For mission-critical applications demanding continuous uptime, the 6kVA UPS can provide expandable runtime with optional external battery packs, such as Tripp Lite's field-replaceable, hot-swappable BP192V12RT3UTAA (sold separately). A battery-independent restart ensures automatic UPS power-up after lengthy power outages, even with expired batteries.

Easily Hot-Swappable with No Expensive Service Calls or Downtime NeededWith its detachable PDU, the SU6000RT4UTFTAA is easily hot-swappable by a user of any skill set. In bypass mode, the PDU passes power to equipment without the use of the power and battery modules, allowing them to be removed while keeping your application in operation. When making repairs or replacing a battery, no lengthy service calls or downtime are necessary.

**Economy Mode Helps the Environment and Your Cash Flow**Operating with a high 96% efficiency in optional economy mode, the SU6000RT4UTFTAA significantly reduces BTU heat output and operating energy costs.

Intuitive Front-Panel Interface for Convenient UPS Operation and Monitoring Front-panel LEDs indicate line power, online mode, economy/bypass mode, on-battery, charger and AC output status at a glance. The LCD readout with scroll controls supports visual monitoring of a variety of control options to support advanced UPS settings and configurations. The panel rotates for comfortable viewing in rack-

#### **Highlights**

- Zero transfer time between AC power and battery for uninterrupted operation
- PDU keeps essential equipment powered during hot-swap battery replacement or repair
- 2U transformer supports power protection of both low- and highvoltage components
- Optional external batteries provide additional runtime for essential applications
- Complies with the Federal Trade Agreements Act (TAA) for GSA Schedule purchases

#### **Applications**

- Delivering perfectly regulated sine wave output to missioncritical equipment
- Protecting connected components from dangerous surges, spikes and line noise
- Keeping equipment operational through short power failures
- Allowing time to save data and safely shut down components in case of a prolonged blackout

### **Package Includes**

- SU6000RTHVPMTAA hotswappable UPS power module
- SUPDMB6KTAA detachable PDU w/maintenance bypass switch
- SU6000XFMR2UTAA lowvoltage transformer
- USB cable
- DB9 cable
- EPO cable
- Rack-mounting hardware
- Owner's manual



mount or tower configuration.

**Optional WEBCARDLX Network Interface Offers 24/7 Access**An accessory slot accommodates the optional Java-free HTML5-based WEBCARDLX interface, which enables full remote access for site power and UPS status monitoring, configuration, control and email notifications via secure web browser, SNMP, telnet or SSH. It supports 10/100 Mbps auto-sensing for optimum communication with an Ethernet network. Automated alerts help prevent accidental overloads, power loss and downtime.

Advanced Communications PortsUSB and DB9 ports (cables are included) enable data-saving unattended shutdown of connected systems when used with Tripp Lite's free downloadable PowerAlert® software. Capabilities include detailed monitoring of load levels, self-test data and utility power conditions.

**Versatile Installation Options**Hardware is included for mounting the 6kVA UPS system in 6U of space in an EIA-standard 19-inch 4-post rack. Use two optional 2POSTRMKITHD kits for 2-post rack mounting or the optional 2-9USTAND for mounting in an upright tower position.

**TAA-Compliant UPS for GSA Schedule Purchases**The SU6000RT4UTFTAA is compliant with the Federal Trade Agreements Act (TAA) for GSA Schedule purchases.

**2-Year Warranty, \$250K Ultimate Lifetime Insurance and Environmentally Responsible Design**The SU6000RT4UTFTAA comes with a 2-year warranty and \$250,000 of Ultimate Lifetime Insurance for any connected components damaged by a power surge (U.S., Canada and Puerto Rico only). It's manufactured in compliance with strict RoHS specifications, reflecting Tripp Lite's commitment to environmental responsibility.

## **Specifications**

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OVERVIEW	OVERVIEW			
UPC Code	037332223708			
UPS Type	On-Line			
INPUT				
Input Phase	Single-Phase			
Rated input current (Maximum Load)	31.9A (200V), 30.6A (208V), 29A (220V), 27.7A (230V), 26.6A (240V)			
Nominal Input Voltage(s) Supported	208V AC; 240V AC			
Nominal Input Voltage Description	Factory configured to 208V			
UPS Input Connection Type	L6-30P			
UPS Input Cord Length (ft.)	10			
UPS Input Cord Length (m)	3.1			
Recommended Electrical Service	30A			
OUTPUT				
Output Capacity (VA)	6000			
Output Capacity (kVA)	6.00			
Output Capacity (Watts)	5400			



Output Capacity (kW)	5.40
Output Capacity Details	Output capacity de-rates to 4992 watts when used at 208V nominal; 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 the overload is cleared
Power Factor	0.9
Crest Factor	3:1
Nominal Voltage Details	This configuration requires the Power Module be set to 208 or 240V output voltage; included step-down transformer supports 120V output (when the voltage-selection switch on the transformer module is set to match the 208 or 240V power module setting)
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%
Output Receptacle Details	Output receptacles and input line cord are mounted on a detachable PDU backplate with bypass switch to enable hot-swappable power module replacement
Output Circuit Breakers	High voltage 20A breaker protects L6-20R outlets, L6-30R outlets are unbreakered; Low voltage 20A breakers protect 4 5-15/20R outlets each; Low voltage 15A breakers protect 2 5-15/20R outlets each
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) 5-15R; (8) 5-15/20R; (2) L6-20R; (2) L6-30R
Individually Controllable Load Banks	No
BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
Runtime Full Load (min.)	2 min. (5400 watts)
Runtime Half Load (min.)	8.5 min. (2700 watts)
Expandable Runtime	Yes
External Battery Pack Compatibility	<a class="productLink" href="//tripplite.eaton.com/external-192v-3u-rack-tower-battery-pack-select-tripp-lite-ups-taa~BP192V12RT3UTAA">BP192V12RT3UTAA</a> ; <a class="productLink" href="//tripplite.eaton.com/external-192v-tower-battery-pack-for-select-tripp-lite-ups-systems-su5000rt4u-su8000rt4u~BP192V787C-1PH">BP192V787C-1PH"&gt;BP192V787C-1PH"&gt;BP192V787C-1PH</a>
DC System Voltage (VDC)	192
Battery Recharge Rate (Included Batteries)	6 hours from 10% to 90% (typical, full load discharge)
Battery Access	Front panel battery access door
Internal UPS Replacement Battery Cartridge	<a class="productLink" href="//tripplite.eaton.com/4U-UPS-Replacement-192VDC-Battery-Cartridge-1-set-of-16-Tripp-Lite-SmartOnline-UPS~RBC5-192">RBC5-192"&gt;RBC5-192</a>



Battery Replacement Description	Hot-swappable, user replaceable batteries
VOLTAGE REGULATION	
Voltage Regulation Description	Online, double-conversion power conditioning
Overvoltage Correction	Corrects overvoltages as high as 300V (<90% load) and 280V (full load)
Undervoltage Correction	Corrects undervoltages as low as 100 (<50% load) and 155V (full load); derates linearly
USER INTERFACE, ALERTS & CON	TROLS
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 (see manual)
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 power to connected loads.
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
SURGE / NOISE SUPPRESSION	
UPS AC Suppression Joule Rating	2595
UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
PHYSICAL	
Primary Form Factor	Rackmount
Rack Height	6U
Cooling Method	Fans
Included Mounting Accessory Description	Two sets of adjustable 4 post 19 inch rackmount installation rails included
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> )
Maximum Device Depth (cm)	55.88
Maximum Device Depth (in.)	22
Maximum Device Depth (mm)	559
Minimum Required Rack Depth with External Battery Pack (cm)	74
Minimum Required Rack Depth with External Battery Pack (in.)	29



Mount Comp   Syster  Primary UPS Depth (mm) 526  Primary UPS Height (mm) 174  Primary UPS Width (mm) 445  Shipping Dimensions (hwd / in.) 12.00  Shipping Dimensions (hwd / cm) 30.48  Shipping Weight (lbs.) 155.00  Shipping Weight (kg) 70.31  Stepdown Transformer Dimensions (hwd / cm) 8.89 x	st rackmount installation requires two <a class="productLink" href="//tripplite.eaton.com/2-Post-Rack-nt-Installation-Kit-3U-Larger-UPS-Transformer-Battery-Pack-ponents~2POSTRMKITHD">2POSTRMKITHD</a> accessories; Tower installation requires one sp; <a class="productLink" href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-ems~2-9USTAND">2-9USTAND</a> accessory
without External Battery Pack (in.)  Optional Mounting Accessory Notes  2 post Mount Comp & Mount	st rackmount installation requires two <a class="productLink" href="//tripplite.eaton.com/2-Post-Rack-nt-Installation-Kit-3U-Larger-UPS-Transformer-Battery-Pack-ponents~2POSTRMKITHD">2POSTRMKITHD</a> accessories; Tower installation requires one sp; <a class="productLink" href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-ems~2-9USTAND">2-9USTAND</a> accessory
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(hw'd / cm)  Stendown Transformer Dimensions	
Stendown Transformer Dimensions	
(hwd / in.) 3.50 x	x 17.50 x 22.00
Stepdown Transformer Height (mm) 89	
Stepdown Transformer Width (mm) 445	
Stepdown Transformer Depth (mm) 559	
Stepdown Transformer Weight (kg) 33.11	1
Stepdown Transformer Weight (lbs.) 73	
UPS Housing Material Steel	I
UPS Power Module Dimensions (hwd, cm) 17.40	0 x 44.45 x 52.58
UPS Power Module Dimensions (hwd, in.) 6.85 x	x 17.50 x 20.70
UPS Power Module Weight (kg) 52.62	2
UPS Power Module Weight (lbs.) 116	
ENVIRONMENTAL	
Operating Temperature Range +32 to	to +104 degrees Fahrenheit / 0 to +40 degrees Celsius
Storage Temperature Range +5 to -	+122 degrees Fahrenheit / -15 to +50 degrees Celsius
Relative Humidity Up to	o 95%, non-condensing
AC Mode BTU / Hr. (Full Load) 1767	,
AC Economy Mode BTU / Hr. (Full Load) 768	
Battery Mode BTU / Hr. (Full Load) 2279	



AC Mode Efficiency Rating (100% Load)	90%
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	
Network Management Cards	SNMPWEBCARD; <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/Web-Management-Accessory-Card~WEBCARDLX">WEBCARDLX</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	Additional contact closure support with optional RELAYIOCARD and RELAYIOMINI interface cards. RELAYIOMINI installation requires removal of panel containing USB ports
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, DB9 serial and EPO cables included
WatchDog Compatibility	Yes
Communications Interface	DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface; USB (HID enabled)
LINE / BATTERY TRANSFER	
Transfer Time	No transfer time (0 ms.) in online, double-conversion mode
Transfer Time (Economy Mode)	8ms. typical power failure response in optional economy mode
Low Voltage Transfer to Battery Power (Setpoint)	156V (full load) / 100V (50% load or less, derates linearly)
High Voltage Transfer to Battery Power (Setpoint)	280V (full load) / 300V (90% load or less)
FEATURES & SPECIFICATIONS	
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; Support for daily startup and shutoff; 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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