



Tripp Lite
1111 West 35th Street
Chicago, IL 60609 USA
Telephone: +(773) 869 1234
E-mail: saleshelp@tripplite.com

Model #: SU6000RT4UTF

SmartOnline 6kVA On-Line Double-Conversion UPS, 6U Rack/Tower, 208/120V or 240/120V NEMA outlets, Low-Voltage Transformer Included



Highlights

- Completely user hot-swappable—no service call or technician needed
- Protects rackmount servers, telecom systems and other networking equipment in high-voltage environments
- True on-line operation, pure sine wave output and zero transfer time to battery
- 16 outlets (4 5-15R; 8 5-15/20R; 2 L6-20R; 2 L6-30R)
- 6kVA/5400W capacity in 6U total form factor with power module and independent, detachable PDU
- Included 2U low-voltage transformer for total equipment compatibility
- Hot-swappable power and battery modules
- 8.5-minute half-load runtime, 2-minute full-load; expandable runtime with external battery packs
- Front panel LEDs with detailed LCD monitoring and control screen
- USB, RS232 and SNMP communication ports with included PowerAlert software for complete network power management and control
- \$250,000 Ultimate Lifetime Insurance; 2-year warranty

Description

Featuring true on-line operation with pure sine wave output, zero transfer time to battery and complete UPS replacement capability with no downtime, the SU6000RT4UTF provides the highest level of protection available for mission-critical equipment from all power problems. It converts incoming AC power to DC, and re-converts it back to filtered AC output with a pure sine wave, providing ultimate protection. The SU6000RT4UTF has a 6kVA/5400W capacity and 16 AC outlets (4 5-15R; 8 5-15/20R; 2 L6-20R; 2 L6-30R). Using the 2U transformer, the SU6000RT4UTF can support both low- and high-voltage equipment.

With its detachable PDU, the SU6000RT4UTF is easily hot-swappable by a user of any skill set—no need for lengthy and expensive service calls, and no downtime if a repair or battery replacement is needed. 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.

UPS 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 SU6000RT4UTF's runtime can be expanded with external battery packs.

The SU6000RT4UTF features a highly efficient (96%) economy mode setting that can significantly reduce a facility's energy costs by minimizing heat output, reducing cooling requirements and consuming less electricity.

An LCD display with LED indicators enables IT personnel to monitor operating modes and conditions. The LCD/LED panel rotates for viewing in horizontal rack or vertical tower installations and includes an audible alarm that signals various conditions.

The SU6000RT4UTF features a USB port and a DB9 port that, when used with Tripp Lite's included PowerAlert software, provide comprehensive network power monitoring and control. An optional SNMPWEBCARD accessory can enable the UPS to operate as an IP managed device.

The unit requires only 6U of rack space in a standard rack enclosure and can be installed in a 2-post rack using the 2POSTRMKITHD accessory (2 required), or in a tower configuration with the 2-9USTAND accessory.

The SU6000RT4UTF comes with \$250,000 Ultimate Lifetime Insurance coverage for connected equipment and a 2-year warranty.

Features

- Tripp Lite SU6000RT4UTF 6000VA / 6kVA / 5400 watt on-line, double-conversion UPS system in a 6U rack/tower compatible configuration (4U power module plus 2U low-voltage transformer; at 208V nominal, output is limited to 4992 watts)
- Full-time active power conditioning maintains clean, continuous dual-conversion AC output free of voltage fluctuations, power interruptions and line noise

- Fault tolerant electronic bypass maintains utility output during a variety of UPS fault conditions
- Detachable back panel PDU contains input line cord connection, output receptacles and manual bypass switch to support hot-swappable whole UPS replacement with no interruption to connected equipment
- L6-30P input plug
- UPS supported outlets include two L6-30R, two L6-20R, 8 5-15/20R and 4 5-15R outlets
- Included rail kit supports 4U 19 inch rackmount installation in 4 post racks
- Optional 2POSTRMKITHD supports installation in 2 post 19 inch racks (2 required for SU6000RT4UTF)
- Optional 2-9USTAND supports upright tower placement (1 required for SU6000RT4UTF)
- Maximum installed rack depth of only 21.8 in. / 55.3 cm
- Maintains full-time sine wave output within 2% of selected 208/240V and 120V nominal at 60Hz in double conversion mode
- Corrects brownouts to 156V at full load (100V at 50% load or less)
- Corrects overvoltages to 290V at full load (300V at 90% load or less)
- Double-conversion operation offers full-time AC to DC, then DC to AC conversion to maintain perfectly regulated 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
- High efficiency ECONOMY MODE operation significantly reduces BTU heat output and operating energy costs
- Network-grade AC surge and noise suppression
- Supports detailed monitoring of equipment load levels, self-test data and utility power conditions via built-in RS-232, USB and optional SNMP card slot interfaces
- UPS card slot supports one card-based network interface option (part # SNMPWEBCARD) or dry-contact monitoring accessory (part # RELAYIOCARD)
- 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)
- HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X
- 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
- Front panel LEDs and LCD readout with scroll controls support front-panel visual monitoring of all major UPS functions with support for a variety of control options to support advanced UPS settings and configurations
- LED/LCD display panel rotates for viewing in rackmount or tower configurations
- Supports Emergency Power Off (EPO) via built-in interface
- Battery independent restart ensures automatic UPS power-up without user interaction after lengthy power outages, even when batteries are expired and require replacement
- BP192V12-3U external battery packs are field replaceable and hot swappable
- Some external battery configurations require the use of Tripp Lite's [External Battery Configuration Software](#) (see manual)
- \$250,000 connected equipment insurance;

Specifications

| OUTPUT | |
|-------------------------------------|--|
| Output Volt Amp Capacity (VA) | 6000 |
| Output kVA capacity (kVA) | 6.0 |
| Output Watt Capacity (watts) | 5400 |
| Output kW capacity | 5.4 |
| Output power factor | .9 |
| Output Capacity Details | Output capacity de-rates to 4992 watts when used at 208V nominal |
| Crest Factor | 3:1 |
| Nominal Output Voltage(s) Supported | 120V; 208V; 240V |

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| 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 | 4 5-15R outlet(s); 8 5-15/20R outlet(s); 2 L6-20R outlet(s); 2 L6-30R outlet(s) |
| 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 breaker | 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 |
| INPUT | |
| Rated input current (at 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 |
| Recommended Electrical Service | 30A |
| Phase | Single-Phase |
| BATTERY | |
| Full load runtime (minutes) | 2 min. (5400 watts) |
| Half load runtime (minutes) | 8.5 min. (2700 watts) |
| Expandable battery runtime | Runtime is expandable with external battery packs |
| External battery pack compatibility | BP192V12-3U ; BP192V557C-1PH ; BP192V787C-1PH ; BP192V1037C-1PH ; BP192V1407C-1PH |

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| DC system voltage (VDC) | 192 |
| Battery recharge rate (included batteries) | 6 hours from 10% to 90% (internal batteries) |
| Replacement battery cartridge (internal UPS battery replacement) | RBC5-192 |
| Battery Access | Front panel battery access door |
| 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 (|
| Undervoltage correction | Corrects undervoltages as low as 100 (|
| 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 |
| Alarms | Unique audible alarms for all major UPS, environmental and power conditions (see manual) |
| Alarm cancel operation | Alarm cancel switch |
| 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. |
| SURGE / NOISE SUPPRESSION | |
| UPS AC suppression response time | Instantaneous |
| EMI / RFI AC noise suppression | Yes |
| PHYSICAL | |
| Installation form factors supported with included accessories | 4 post 19 inch rackmount |
| Included mounting accessory description | Two sets of adjustable 4 post 19 inch rackmount installation rails included |
| Installation form factors supported with optional accessories | 2 post rackmount (2POSTRMKITHD); Tower (2-9USTAND) |
| Optional mounting accessory notes | 2 post rackmount installation requires TWO 2POSTRMKITHD accessories, Tower installation requires ONE 2-9USTAND accessory. |
| Primary form factor | Rackmount |

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|---|---|
| UPS / Power Module dimensions in primary form factor (height x width x depth / inches) | 6.85 x 17.5 x 20.7 |
| UPS / Power Module dimensions in primary form factor (height x width x depth / cm) | 17.4 x 44.5 x 52.6 |
| Installed whole system maximum rack depth (inches) | 21.8 |
| Installed whole system maximum rack depth (cm) | 55.4 |
| Rack Height | 6U |
| Secondary form factor | Tower |
| UPS / Power Module weight (lbs) | 116.2 |
| UPS / Power Module weight (kg) | 52.8 |
| Stepdown transformer dimensions (height x width x depth / inches) | 3.5 x 17.5 x 21.8 |
| Stepdown transformer dimensions (height x width x depth / cm) | 8.8 x 44.5 x 55.4 |
| Stepdown transformer weight (lbs) | 72.6 |
| Stepdown transformer weight (kg) | 33 |
| UPS Shipping dimensions (height x width x depth / inches) | 22.5 x 25 x 30 |
| UPS Shipping dimensions (height x width x depth / cm) | 57.2 x 63.5 x 76.2 |
| Shipping weight (lbs) | 293 |
| Shipping weight (kg) | 133 |
| Cooling method | Fans |
| UPS housing material | Steel |
| ENVIRONMENTAL | |
| Operating Temperature Range | +32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius |

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|--|---|
| 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) | 1767 |
| AC economy mode BTU / hr. (full load) | 707 |
| Battery mode BTU / hr. (full load) | 1784 |
| 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 | Yes |
| LINE / BATTERY TRANSFER | |
| Transfer time | No transfer time (0 ms.) in online, double-conversion 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) |
| SPECIAL FEATURES | |
| 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 & high efficiency features | High efficiency economy mode operation; Support for daily startup and shutoff; Schedulable daily hours of economy mode operation |
| CERTIFICATIONS | |
| UPS Certifications | Tested to UL1778 (USA); Tested to CSA (Canada); Meets FCC Part 15 Category A (EMI); ROHS (Restriction of Hazardous Substances) |
| 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**

| Related Model | Description | Qty. |
|--------------------------------|---|------|
| RELAYIOMINI | 3 Relay I/O Mini-module | 1 |
| BP192V12-3U | BP192V12-3U - External Battery Pack for UPS System | 1 |
| 2POSTRMKITHD | Enables 2-Post Rackmount Installation of 3U and Larger UPS, Transformer and Battery Pack Components | 2 |
| 2-9U STAND | Enables Tower Placement of Rackmount UPS Systems | 1 |
| 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 |
| WEXT3-SU6000 | 3-Year Extended Warranty - For SU6000 models | 1 |
| WEXT5-SU6000 | 5-Year Extended Warranty - For SU6000 models | 1 |
| AS400CABLEKIT2 | Power Management Tools - UPS Communication Cable Kit for System i / AS400 / iSeries Servers | 1 |

More information, including related products, owner's manuals, and additional technical specifications, can be found online at www.tripplite.com/en/products/model.cfm?txtModelID=4528.

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