



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

Model #: SU6000RT4UHV

SmartOnline 6kVA On-Line Double-Conversion UPS, 4U Rack/Tower, 200-240V NEMA outlets

Highlights



- 6kVA / 6000VA / 5400W on-line double-conversion UPS; 0.9 power factor
- 200/208/220/230/240V 50/60Hz output; Economy mode option
- 4U Rack/Tower compatible; Hot-swap power and battery modules
- USB, RS232 & EPO ports; SNMP/WEB and contact-closure card options
- Front panel LEDs with detailed LCD monitoring and control screen
- Expandable runtime with optional external battery packs
- NEMA L6-30P input (3 wire); L6-30R & L6-20R outputs

Description

Tripp Lite SU6000RT4UHV 6000VA / 6kVA / 5400 watt online, double-conversion UPS system offers complete power protection for critical server, network and telecommunications equipment in a single 4U rack/tower compatible housing. Full-time active power conditioning provides clean, continuous dual-conversion AC output free of voltage fluctuations, power interruptions and line noise. Fault-tolerant auto-bypass prevents unexpected service interruptions during UPS overload or internal fault conditions. Detachable back panel PDU with manual bypass switch supports hot-swappable whole UPS replacement with no interruption to connected equipment. Single all-in-one rack / tower housing installs in only 4 rack spaces (4U) with a maximum installed depth of only 20.7 in. / 52.6cm. Maintains full-time sine wave output within 2% of selectable 200/208/220/230/240V nominal during brownouts as low 100V and overvoltages as high as 300V. Expandable runtime is supported with optional BP192V12-3U external battery packs. Battery independent restart ensures automatic UPS power-up without user interaction after lengthy power outages, even when batteries are expired and require replacement. 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. Highly efficient operation in optional economy mode 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 and USB interfaces. Optional SNMP/Web and contact-closure communications card accessories available. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X. Included PowerAlert monitoring software offers detailed site power and UPS updates with support for safe auto-shutdown of connected systems as UPS batteries become depleted. Included software packages include PowerAlert Local, PowerAlert Network Shutdown Agent and PowerAlert Network Management System for complete support for a wide variety of application types. Supports Emergency Power Off (EPO) via built-in interface. Front panel LEDs and LCD readout with scroll controls support front-panel visual monitoring of all major UPS 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. L6-30P input plug. UPS supported outlets include two L6-30R and two L6-20R outlets. External battery packs are field replaceable and hot swappable.

Features

- Tripp Lite SU6000RT4UHV 6000VA / 6kVA / 5400 watt online, double-conversion UPS system in a single 4U rack/tower compatible housing (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 and output receptacles, plus manual bypass switch to support hot-swappable whole UPS replacement with no interruption to connected equipment
- L6-30P input plug; two L6-30R and two L6-20R outlets
- Included rail kit supports 4U 19 inch rackmount installation in 4 post racks
- Optional 2POSTRMKITHD supports installation in 2 post 19 inch racks (1 required for SU6000RT4UHV)
- Optional 2-9USTAND supports upright tower placement (1 required for SU6000RT4UHV)
- Maximum installed rack depth of only 20.7 in. / 52.6cm
- Maintains full-time sine wave output within 2% of selected 200/208/220/230/240V nominal 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)

- Supports 50/60Hz operation for worldwide frequency compatibility
- 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)
- Frequency conversion mode enables conversion of 60Hz to 50Hz or 60Hz to 50Hz (no de-rating)

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 | 0.9 |
| Output Capacity Details | Output capacity de-rates to 4992 watts when used at 208V nominal |
| Crest Factor | 3:1 |
| Nominal Output Voltage(s) Supported | 200V; 208V; 220V; 230V; 240V |
| Frequency compatibility | 50/60 Hz (auto-selectable) |
| Frequency compatibility details | Output frequency matches input nominal on startup; Frequency conversion mode enables conversion of 60Hz to 50Hz or 50Hz to 60Hz (no de-rating) |
| Output voltage regulation (line mode) | +/- 2% |
| Output voltage regulation (Economy line mode) | +/- 10% |

| | |
|---|---|
| Output voltage regulation (Battery mode) | +/- 2% |
| Built-in UPS output receptacles | 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 | 20A breaker protects L6-20R outlets, 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 (at maximum load) | 31.9A (200V), 30.6A (208V), 29A (220V), 27.7A (230V), 26.6A (240V) |
| Nominal Input Voltage(s) Supported | 200V AC; 208V AC; 220V AC; 230V 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 |
| BATTERY | |
| Full load runtime (minutes) | 2 minutes (5400 watts) |
| Half load runtime (minutes) | 8.5 minutes (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 |
| 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 internal batteries |
| VOLTAGE REGULATION | |

| | |
|---|--|
| Voltage regulation description | Online, double-conversion power conditioning |
| Oversvoltage correction | Corrects oversvoltages as high as 300V (|
| Undersvoltage correction | Corrects undersvoltages 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 optional accessories | 2 post rackmount (2POSTRMKITWM); Tower (2-9USTAND) |
| Primary form factor | Rackmount |
| 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 total rack space height (rack spaces) | 4U |
| Secondary form factor | Tower |
| UPS / Power Module weight (lbs) | 108 |
| UPS / Power Module weight (kg) | 49 |
| UPS Shipping dimensions (height x width x depth / inches) | 12.7 x 23.6 x 29.1 |
| UPS Shipping dimensions (height x width x depth / cm) | 32.3 x 59.9 x 73.9 |

| | |
|---|---|
| Shipping weight (lbs) | 158 |
| Shipping weight (kg) | 71.7 |
| UPS housing material | Steel |
| Cooling method | Fans |
| 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) | 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 |
| 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 |
| Transfer time (economy mode) | 8 ms. 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) |
| 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 (U.S., Canada & Puerto Rico) | 2-year limited warranty |
| Connected Equipment Insurance (U.S., Canada & Puerto Rico) | \$250,000 Ultimate Lifetime Insurance |

Related Items

Optional Products

| Product Type | Related Model | Description | Qty. |
|--------------------------|--------------------------------|---|------|
| Environmental Monitoring | ENVIROSENSE | Monitors temperature, humidity and contact-closure inputs. (Requires SNMPWEBCARD or switched PDU.) | 1 |
| Extended Warranties | WEXT3-SU6000HV | 3-Year Extended Warranty - For SU6000RT3UHV only | 1 |
| Extended Warranties | WEXT5-SU6000HV | 5-Year Extended Warranty - For SU6000RT3UHV only | 1 |
| External Battery Packs | BP192V12-3U | BP192V12-3U - External Battery Pack for UPS System | 1 |
| Rackmount/Wallmount Kits | 2POSTRMKITHD | Enables 2-Post Rackmount Installation of 3U and Larger UPS, Transformer and Battery Pack Components | 1 |
| SNMP Accessories | RELAYIOCARD | Programmable Relay I/O Card | 1 |
| SNMP Accessories | SNMPWEBCARD | For remote monitoring and control via SNMP, Web, or Telnet. | 1 |
| Tower Stands | 2-9USTAND | Enables Tower Placement of Rackmount UPS Systems | 1 |
| UPS Accessories | RELAYIOMINI | 3 Relay I/O Mini-module | 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=4534.

Copyright © 2011 Tripp Lite. All rights reserved. All trademarks are the sole property of their respective owners. Tripp Lite has a policy of continuous improvement. Specifications are subject to change without notice. Photos may differ slightly from final products.