

## 208/240V 5000VA 5000W On-Line UPS, Unity Power Factor, Hardwire/L6-30P Input, 3U

MODEL NUMBER: SU5KRT3UHV



On-line double-conversion UPS provides pure sine wave AC output to server and network equipment in data centers and computer rooms.

### Features

#### Protects Mission-Critical Rack-Mounted Equipment against Damage, Downtime and Data Loss

Tripp Lite's SmartOnline® SU5KRT3UHV Unity Power Factor UPS system protects connected equipment against damage, downtime and data loss due to power outages, voltage fluctuations and transient surges. Unity Power Factor design enables full 5000VA / 5000W output capacity when used with hardwire 208/240V input power (output de-rates to 4800W at 208V with included L6-30P cord option). In double-conversion mode, this UPS system maintains perfect output by continuously converting AC input to DC, then reconverting UPS output to fully regulated sine wave AC with  $\pm 1\%$  voltage regulation and zero transfer time between online and battery modes. Featuring true on-line, double-conversion operation, Tripp Lite's SU5KRT3UHV provides the highest level of UPS power protection for critical server, network and telecom equipment.

**Reliable, Expandable Battery Backup** 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 internal battery set provides 14 minutes of support at half load and 5 minutes at full load. During normal operation, incoming utility power keeps the battery fully charged so backup power will be available when needed. Advanced temperature-controlled battery charge management system provides efficient recharge and enhanced battery lifespan. For mission-critical applications demanding continuous uptime, the 5kVA UPS can provide expandable runtime with optional BP192V12RT3US external battery pack (sold separately). Battery-independent restart ensures automatic UPS power-up after lengthy power outages, even with expired batteries.

**Economy Mode Helps the Environment and Your Cash Flow** Operates with >98% full-load efficiency in optional economy mode significantly reducing BTU heat output and operating energy costs.

**Intuitive Front-Panel Interface offers Convenient Monitoring** Front-panel LEDs indicate line power, AC output, On-battery mode, and Fault conditions. 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-mount or tower configuration.

**Pre-installed WEBCARDLXMINI Network Interface Offers 24/7 Access** Pre-installed Java-free HTML5-based WEBCARDLXMINI interface 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 Ports USB and DB9 ports with included cabling 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. DB9 ports also support basic contact-closure monitoring to report On-battery and Low-battery status for legacy systems.

**Versatile Installation Options** Hardware is included for mounting the complete 5kVA UPS system with

### Highlights

- Unity (1.0) power factor equalizes VA and wattage to safely support more equipment
- Zero transfer time between on-line and battery modes for uninterrupted operation
- Optional external battery packs provide additional runtime for applications requiring it
- Pre-installed WEBCARDLXMINI network interface supports Auto Probe feature
- ENERGY STAR-certified to save electricity, lower costs and protect the environment

### Applications

- Delivering perfectly regulated sine wave output to mission-critical 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

- On-line double-conversion UPS
- Pre-installed WEBCARDLXMINI network management card
- (2) Hardwire strain reliefs
- USB cable
- RS-232 cable
- NEMA L6-30P power cable
- Rack-mounting hardware



internal batteries in 3U of space in an EIA-standard 19-inch 4-post rack. Use the optional 2POSTRMKITHD for 2-post rack mounting or the optional 2-9USTAND for mounting in an upright tower position.

**2-Year Warranty, \$250K Ultimate Lifetime Insurance and Environmentally Responsible Design**The SU5KRT3UHV 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.

- Owner's manual

## Specifications

| OVERVIEW                           |   |
|------------------------------------|---|
| UPC Code                           | 037332202802  |
| UPS Type                           | On-Line   |
| INPUT                              |   |
| Rated input current (Maximum Load) | Hardwire AC input: 27A (200V), 25.6A (208V), 22.2A (240V) maximum; With included NEMA L6-30P input: 24A (200/208/240V) maximum; Max inrush current: 100A  |
| Nominal Input Voltage(s) Supported | 200V AC; 208V AC; 240V AC   |
| Nominal Input Voltage Description  | 208V factory default  |
| UPS Input Connection Type          | Hardwire; L6-30P  |
| UPS Input Connection Description   | Hardwire input supports 3 wire L1, L2/N, PE(GND) input configurations; Includes optional L6-30P input cable   |
| Input Phase                        | Single-Phase  |
| Input Frequency                    | 50 / 60 Hz  |
| Input Cord Length (ft.)            | 10  |
| Input Cord Length (m)              | 3.05  |
| Power Factor (Input)               | 0.98 minimum (full load, nominal input voltage)   |
| THDi                               | <8% full load; <10% half load   |
| OUTPUT                             |   |
| Output Volt Amp Capacity (VA)      | 5000  |
| Output kVA Capacity (kVA)          | 5   |
| Output Watt Capacity (Watts)       | 5000  |
| Output kW Capacity (kW)            | 5   |
| Output Capacity Details            | Supports 5000VA / 5000W with hardwire AC input; Maximum output capacity de-rates to 4800W (208V) / 4600W (200V) when used with included L6-30P AC input cord; Inverter supports up to 104% load continuously, Up to 125% / 150% for 1.0 / 0.5 min. before bypass transfer (when available) or shutdown; Loads greater than 150% trigger immediate shutdown; AC TRANSIENT RESPONSE: $\pm 1.5\%$ RMS of initial value (between 10% & 90% load step) |
| Power Factor                       | 1.0   |
| Crest Factor                       | 3:1 maximum   |
| Nominal Voltage Details            | Nominal output voltage selection is available via front panel LCD interface; 200/208/240V recommended   |



|  |   |
|--|---|
| Frequency Compatibility                    | 50 / 60 Hz  |
| Frequency Compatibility Details            | MAX-QUALITY/MAX-EFFICIENCY/AUTO-ADAPTIVE MODES: Output frequency matches input nominal on startup and tracks input frequency up to $\pm 3$ Hz of nominal; When input frequency is greater than $\pm 3$ Hz of nominal, output frequency is inverter regulated to $\pm 0.5$ Hz of nominal; BATTERY MODE: Output frequency is inverter regulated to $\pm 0.5$ Hz of the configured nominal output frequency; FREQUENCY CONVERSION MODE: Output is inverter regulated to the selected 50/60Hz output setting with $\pm 0.5$ Hz regulation (de-rates to 70% capacity, bypass not available); FREQUENCY REGULATION MODE: Enables frequency correction to $\pm 0.5$ Hz of the frequency sensed by the UPS on startup (no de-rating, bypass is available when input frequency is within $\pm 0.5$ Hz of output) |
| Load Management Receptacles                | Two built-in switchable output load banks; BANK 1 (Set of 2 L6-30R outlets); BANK 2 (Set of 2 L6-20R outlets)   |
| Output Circuit Breakers                    | Output Circuit Breakers 30A double-pole breaker protects 2 L6-30R outlets; 20A double-pole breaker protects 4 L6-20R outlets  |
| Output AC Waveform (AC Mode)               | Pure Sine wave  |
| Output AC Waveform (Battery Mode)          | Pure Sine wave  |
| Nominal Output Voltage(s) Supported        | 200V; 208V; 220V; 230V; 240V  |
| Output Receptacles                         | Hardwire; (2) L6-20R; (2) L6-30R  |
| Output Voltage Regulation                  | $\pm 1\%$ Inverter output; $\pm 10\%$ Economy mode; $\pm 15\%$ Bypass mode (configurable from $\pm 5\%$ to $\pm 20\%$ ); Output voltage THD $< 2\%$ (full load) / $< 3\%$ (half load)   |
| Individually Controllable Load Banks       | Yes   |
| <b>BATTERY</b>                             |   |
| Full Load Runtime (min.)                   | 5 minutes (5000 watts)  |
| Half Load Runtime (min.)                   | 14 minutes (2500 watts)   |
| Expandable Battery Runtime                 | Runtime is expandable with external battery packs   |
| Expandable Runtime                         | Yes   |
| Expandable Runtime Description             | Up to 4 external battery packs with sensor cabling are automatically sensed and configured for advanced temperature controlled charging and accurate runtime reporting; Configurations using 5-10 external battery packs are supported, but may require the use of Tripp Lite's EXTERNAL BATTERY CONFIGURATION software for full integration  |
| External Battery Pack Compatibility        | &nbsp;<a class="productLink" href="//www.tripplite.com/External-Battery-Pack-192V-3U-Rack-Tower~BP192V12RT3US">BP192V12RT3US</a>&nbsp;  |
| DC System Voltage (VDC)                    | 192   |
| Battery Recharge Rate (Included Batteries) | 3 hours from 10% to 90% (typical, internal batteries with full load discharge); Charge settings: 1.5A (internal batteries) / 2A (with external battery packs) configures automatically; Supports temperature compensated battery charging   |
| Battery Access                             | Front panel battery access door   |
| Internal UPS Replacement Battery Cartridge | RBC58-3US (qty 1)   |
| Battery Replacement Description            | Hot-swappable, user replaceable internal batteries and external battery packs   |
| <b>VOLTAGE REGULATION</b>                  |   |
| Voltage Regulation Description             | $\pm 1\%$ Inverter output regulation; $\pm 10\%$ in optional Eco mode   |
| Overvoltage Correction                     | Corrects overvoltages as high as 275V   |
| Undervoltage Correction                    | Corrects undervoltages as low as 156V (100% load) / 100V (50% load); derates linearly   |



| <b>USER INTERFACE, ALERTS &amp; CONTROLS</b>                  |   |
|---|---|
| Front Panel LCD Display                                       | Selectable LCD display with Escape, Page Up, Page Down, Enter and Power buttons enable 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 Up, Down, Enter and Esc switches to set and execute LCD functions.  |
| Alarm Cancel Operation  | Alarm cancel switch   |
| Audible Alarm   | Unique audible alarms for all major UPS, environmental and power conditions (see manual)  |
| LED Indicators  | 4 front-panel LEDs indicate AC input, AC output, Battery mode and Fault conditions  |
| <b>SURGE / NOISE SUPPRESSION</b>                              |   |
| UPS AC Suppression Joule Rating                               | 1680  |
| UPS AC Suppression Response Time                              | Instantaneous   |
| EMI / RFI AC Noise Suppression                                | Yes   |
| <b>PHYSICAL</b>   |   |
| Cooling Method  | Load and thermal controlled cooling fans; Field-replaceable (92mm x 38mm, ball-bearing, 115 CFM)  |
| Included Mounting Accessory Description                       | Includes 4 post rackmount installation accessories; Included mounting brackets support front-to-rear rail distances of 520 to 914.4mm (20.5 to 36 in.); Enclosures require a minimum depth of 818 mm (32.2 in.) from the front rails to the closed rear door  |
| Installation Form Factors Supported with Included Accessories | 4 post 19 inch rackmount  |
| Installation Form Factors Supported with Optional Accessories | 2 post rackmount ( <a href="http://www.tripplite.com/2-Post-Rack-Mount-Installation-Kit-3U-Larger-UPS-Transformer-Battery-Pack-Components~2POSTRMKITHD">2-Post-Rack-Mount-Installation-Kit-3U-Larger-UPS-Transformer-Battery-Pack-Components~2POSTRMKITHD</a> ); Tower ( <a href="http://www.tripplite.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND</a> ) |
| Minimum Required Rack Depth (cm)                              | 81.28   |
| Minimum Required Rack Depth (inches)                          | 32  |
| Primary Form Factor   | Rackmount   |
| Primary UPS Depth (mm)  | 762   |
| Primary UPS Height (mm)                                       | 131   |
| Primary UPS Width (mm)  | 445   |
| Rack Height   | 3U  |
| Shipping Dimensions (hwd / in.)                               | 6.89 x 23.70 x 33.35  |
| Shipping Weight (kg)  | 74.16   |
| Unit Dimension Details  | Minimum required rack depth assumes 127mm / 5 in. additional depth for AC input/output cabling; See submittal drawing for additional dimension detail   |
| UPS Housing Material  | Sheet metal   |
| UPS Power Module Dimensions (hwd, in.)                        | 5.14 x 17.5 x 30  |
| UPS Power Module Weight (kg)                                  | 53.30   |



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|---|--|
| UPS Power Module Weight (lbs.)                              | 117.5  |
| <b>ENVIRONMENTAL</b>  |  |
| 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   | 5 to 95%, non-condensing   |
| AC Mode BTU / Hr. (Full Load)                               | 1050   |
| AC Mode Efficiency Rating (100% Load)                       | >94%   |
| AC Economy Mode Efficiency Rating (100% Load)               | >98%   |
| Operating Elevation (ft.)                                   | Up to 6562 ft.   |
| Audible Noise   | 67.1dB (full load) / 53dB (no load) front side 1m  |
| Operating Elevation (m)                                     | Up to 2000m  |
| <b>COMMUNICATIONS</b>                                       |  |
| Network Management Cards                                    | &nbsp;<a class="productLink" href="//www.tripplite.com/network-interface-card-for-select-tripp-lite-ups-systems~WEBCARDLXMINI">WEBCARDLXMINI</a>&nbsp;   |
| Network Monitoring Port Description                         | Includes Pre-installed WEBCARDLXMINI network management card; DB9 port supports RS-232 and Contact-closure signaling   |
| PowerAlert Software   | For local monitoring via the UPS's built-in communication ports, download PowerAlert Local software at <a href="https://www.tripplite.com/poweralert">https://www.tripplite.com/poweralert</a> |
| Communications Cable  | USB, DB9 serial and EPO cables included  |
| WatchDog Compatibility                                      | Yes  |
| Communications Interface                                    | Contact closure; DB9 Serial; EPO (emergency power off); Pre-installed network card; Slot for SNMP/Web interface; USB (HID enabled)   |
| <b>LINE / BATTERY TRANSFER</b>                              |  |
| Transfer Time   | Online to Battery mode: 0 ms. (Zero transfer time)   |
| Transfer Time (Economy Mode)                                | Online to Eco mode: 2 milliseconds / Eco to Battery mode: 8 milliseconds   |
| Low Voltage Transfer to Battery Power (Setpoint)            | 156V (full load) / 100V (50% load or less, derates linearly)   |
| High Voltage Transfer to Battery Power (Setpoint)           | 275V   |
| <b>SPECIAL FEATURES</b>                                     |  |
| Cold Start (Startup in Battery Mode During a Power Failure) | Cold-start operation supported   |
| High Availability UPS Features                              | Auto Probe Monitoring and Reboot (requires WEBCARDLXMINI); Automatic inverter bypass; Hot swappable batteries; On-Line/Double-Conversion; Surge/noise protection; Zero transfer time           |
| Green Energy-Saving Features                                | High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy mode operation; Support for daily startup and shutoff                         |



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| <b>STANDARDS &amp; COMPLIANCE</b>                          |  |
|--|--|
| UPS Certifications   | ENERGY STAR Qualified; Meets FCC Part 15 Category A (EMI); ROHS (Restriction of Hazardous Substances); TAA Compliant; Tested to CSA (Canada); Tested to NOM (Mexico); Tested to UL1778 (USA)   |
| Certification Details                                      | Series Number (s) AG-0358; Safety Standards (Canada) CAN/CSA-C22.2 No. 107.3-14 (3rd Ed)+G11; Safety Standards (U.S.) UL1778:2014 (5th Ed) R10.17; FCC/ICES Compliant CLASS A; 47 CFR FCC PART 15 SUBPART B; Safety Standards (International) IEC62040-1:2008 (1st Ed)+A1:2013; EMI/EMC Standards Class A; IEC62040-2:2016; EAC/PCT, RETIE |
| <b>WARRANTY</b>  |  |
| Product Warranty Period (Worldwide)                        | 2-year limited warranty  |
| Connected Equipment Insurance (U.S., Canada & Puerto Rico) | \$250,000&nbsp;<a class="insuranceLink" href="//www.tripplite.com/support/insurance-policy">Ultimate Lifetime Insurance</a>&nbsp;  |

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