

# 208/240V 6000VA 6000W On-Line Double-Conversion UPS, Unity Power Factor, Hardwire/L6-30P Input, 3U

MODEL NUMBER: SU6KRT3UHV











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 LossSmartOnline® SU6KRT3UHV 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 6000VA / 6000W output capacity when used with hardwire 208/240V input power (output de-rates to 5600W-240V/4800W-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 ±1% voltage regulation and zero transfer time between online and battery modes. Featuring true on-line, double-conversion operation, SU6KRT3UHV provides the highest level of UPS power protection for critical server, network and telecom 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 3 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 6kVA 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 MonitoringFront-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 AccessPre-installed Java-free HTML5-based WEBCARDLXMINI interface enables full remote access for site power and UPS status monitoring,

## **Highlights**

- Unity (1.0) power factor equalizes VA and wattage to safely support more equipment
- Zero transfer time between online 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 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

- 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
- Owner's manual



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 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 6kVA UPS system with 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 SU6KRT3UHV 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 commitment to environmental responsibility.

# **Specifications**

OVERVIEW		
UPC Code	037332177414	
UPS Type	On-Line	
INPUT		
Input Phase	Single-Phase	
Rated input current (Maximum Load)	Hardwire AC input: 32A (200V), 30.7A (208V), 26.6A (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 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	
ОИТРИТ		
Output Capacity (VA)	6000	
Output Capacity (kVA)	6	
Output Capacity (Watts)	6000	
Output Capacity (kW)	6	



Output Capacity Details	Supports 6000VA / 6000W with hardwire AC input; Maximum output capacity de-rates to 5600W (240V) / 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: ±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 ±3Hz of nominal; When input frequency is greater than ±3Hz of nominal, output frequency is inverter regulated to ±0.5Hz of nominal; BATTERY MODE: Output frequency is inverter regulated to ±0.5Hz of the configured nominal output frequency; FREQUENCY CONVERSION MODE: Output is inverter regulated to the selected 50/60Hz output setting with ±0.5Hz regulation (de-rates to 70% capacity, bypass not available); FREQUENCY REGULATION MODE: Enables frequency correction to ±0.5Hz of the frequency sensed by the UPS on startup (no de-rating, bypass is available when input frequency is within ±0.5Hz of output)
Load Management Receptacles	Three built-in switchable output load banks; BANK 1 (Set of 2 L6-30R outlets); BANK 2 (Set of 2 L6-20R outlets); BANK 3 (Set of 2 L6-20R outlets)
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; (4) L6-20R; (2) L6-30R
Output Voltage Regulation	±1% Inverter output; ±10% Economy mode; ±15% Bypass mode (configurable from ±5% to ±20%); Output voltage THD <2% (full load) / <3% (half load)
Individually Controllable Load Banks	Yes
BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
Runtime Full Load (min.)	3 min. (6000W)
Runtime Half Load (min.)	8.5 min. (3000W)
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	<a class="productLink" href="//tripplite.eaton.com/External-Battery-Pack-192V-3U-Rack-Tower~BP192V12RT3US">BP192V12RT3US</a>
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



Battery Replacement Description	Hot-swappable, user replaceable internal batteries and external battery packs	
VOLTAGE REGULATION		
Voltage Regulation Description	±1% Inverter output regulation; ±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	
USER INTERFACE, ALERTS & CONTROLS		
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	
SURGE / NOISE SUPPRESSION		
UPS AC Suppression Joule Rating	1680	
UPS AC Suppression Response Time	Instantaneous	
EMI / RFI AC Noise Suppression	Yes	
PHYSICAL		
Primary Form Factor	Rackmount	
Rack Height	3U	
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 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> )	
Minimum Required Rack Depth (cm)	93.98	
Minimum Required Rack Depth (inches)	37	
Primary UPS Depth (mm)	762	
Primary UPS Height (mm)	131	
Primary UPS Width (mm)	445	
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)	56.79	
UPS Power Module Weight (lbs.)	125.2	
Unit Weight (lbs.)	118.100	
Unit Weight (kg)	53.57	
ENVIRONMENTAL		
Operating Temperature Range	32° to 104°F (0° to 40°C)	
Storage Temperature Range	5° to 122°F (-15° to 50°C)	
Relative Humidity	5 to 95%, non-condensing	
AC Mode BTU / Hr. (Full Load)	1300	
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	
COMMUNICATIONS		
Network Management Cards	<a class="productLink" href="//tripplite.eaton.com/network-interface-card-for-select-tripp-lite-ups-systems~WEBCARDLXMINI">WEBCARDLXMINI</a>	
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 software at https://tripplite.eaton.com/products/power-alert	
Communications Cable	USB, DB9 serial and EPO cables included	
WatchDog Compatibility	Yes	
Network Management Card Description	Network management card included	
Communications Interface	Contact closure; DB9 Serial; EPO (emergency power off); Pre-installed network card; Slot for SNMP/Web interface; USB (HID enabled)	
LINE / BATTERY TRANSFER		
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)	



275V		
Cold-start operation supported		
Auto Probe Monitoring and Reboot (requires WEBCARDLXMINI); Automatic inverter bypass; Hot swappable batteries; Surge/noise protection; Zero transfer time		
High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy mode operation; Support for daily startup and shutoff		
APPLICATIONS		
Large Network; Mission Critical Applications		
RETIE (Colombia); CSA (Canada); NOM (Mexico); UL 1778		
RoHS; ENERGY STAR Qualified; FCC Part 15 Class A (USA); Trade Agreements Act (TAA)		
WARRANTY & SUPPORT		
2-year limited warranty		



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