

# 208/240V 6000VA 6000W On-Line UPS, Unity Power Factor with Bypass PDU and 120V Transformer, Hardwire/L6-30P Input, 5U

# MODEL NUMBER: SU6KRT3UTFMB



Double-conversion UPS with detachable PDU and maintenance bypass switch provides fulltime sine wave output for advanced network applications.

### Features

**Protects Mission-Critical Rack-Mounted Equipment against Damage, Downtime and Data Loss**Tripp Lite's SmartOnline® SU6KRT3UTFMB Unity Power Factor UPS system with Maintenance Bypass Switch and Detachable Bypass PDU 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. Optional L6-30P input cord included (output de-rates to 5600W with 240V input & 4800W with 208V input when the L6-30P cord is used). 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, Tripp Lite's SU6KRT3UTFMB provides the highest level of UPS power protection for critical server, network and telecom equipment.

**High Availability Configuration Offers Reliable, Expandable Battery Backup**Included Maintenance Bypass Switch is mounted on a detachable Bypass PDU that securely mounts to the rear-rails of a 4 post rack enclosure and remains safely in-place powering your equipment during UPS maintenance. The UPS connects to the Bypass PDU using a sophisticated blind-mate connector set with self-aligning guide-pins to ensure safe and reliable whole-UPS replacement with zero downtime for connected equipment. 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 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

## 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
- Detachable PDU with maintenance bypass switch allows convenient hot-swapping
- Pre-installed WEBCARDLXMINI network interface supports Auto Probe feature
- Step-down transformer converts 208/240V input into 120V output for low-voltage equipment

### 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
- Detachable bypass PDU
- Step-down transformer
- (2) Hardwire strain reliefs
- USB cable
- RS-232 cable
- L6-30P power cable
- Rack-mounting hardware
- Owner's manual



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 HTML5based 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 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 DesignThe SU6KRT3UTFMB 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.

OVERVIEW		
UPC Code	037332241535	
UPS Type	On-Line	
INPUT		
Rated input current (Maximum Load)	Hardwire AC input: 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	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	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	

# Specifications



[	
Output Volt Amp Capacity (VA)	6000
Output kVA Capacity (kVA)	6
Output Watt Capacity (Watts)	6000
Output kW Capacity (kW)	6
Output Capacity Details	Supports 6000VA / 6000W with hardwire AC input; Maximum output capacity de-rates to 5600W (240V) / 4800W (208V) 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); Included Step-down transformer must be hardwired to UPS output when supporting 120V loads greater than 4800W (208V) / 5600 (240V)
Power Factor	1.0
Crest Factor	3:1 maximum
Nominal Voltage Details	Nominal output voltage selection is available via front panel LCD interface; 208/240V setting required for transformer compatibility
Frequency Compatibility	60 Hz
Frequency Compatibility Details	MAX-QUALITY/MAX-EFFICIENCY/AUTO-ADAPTIVE MODES: Output frequency matches 60Hz 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 nominal output frequency; FREQUENCY REGULATION MODE: Enables 60Hz frequency correction to ±0.5Hz (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; Set of two 20A double-pole breakers protects 2 L6-20R outlets each; Set of 2 20A single-pole breakers protect 4 5-20R outlets each; Set of 2 15A single-pole breakers protect 2 5-15R 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) 5-20R; Hardwire; (4) 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
BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
Full Load Runtime (min.)	3 minutes (6000 watts)
Half Load Runtime (min.)	8.5 minutes (3000 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 for full integration



External Battery Pack Compatibility	<a class="productLink" href="//www.tripplite.com/External-Battery-Pack-192V-3U-Rack-&lt;br&gt;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
Internal UPS Replacement Battery Cartridge	RBC58-3US (qty 1)
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 & CON	IROLS
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	
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 965mm (38 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="//www.tripplite.com/2-Post-Rack-Mount-Installation-Kit-3U-&lt;br&gt;Larger-UPS-Transformer-Battery-Pack-Components~2POSTRMKITHD">2POSTRMKITHD</a> ); Tower ( <a class="productLink" href="//www.tripplite.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-&lt;br&gt;Systems~2-9USTAND">2-9USTAND</a> )
Minimum Required Rack Depth (cm)	99.06
Minimum Required Rack Depth (inches)	39



Tripp Lite 1111 W. 35th Street Chicago, IL 60609 USA Telephone: 773.869.1234 www.tripplite.com

	Rackmount	
Primary UPS Depth (mm)		
· · · · · · · · · · · · · · · · · · ·	902	
Primary UPS Height (mm)	222	
Primary UPS Width (mm)	445	
Rack Height	3U	
Shipping Dimensions (hwd / in.)	36.50 x 25.75 x 40.75	
Shipping Weight (kg)	130.18	
Bypass PDU Dimensions (hwd / cm)	13.03 x 29.46 x 25.4	
Bypass PDU Dimensions (hwd / in.)	5.13 x 11.6 x 10	
Stepdown Transformer Dimensions (hwd / cm)	8.89 x 44.45 x 55.27	
Stepdown Transformer Dimensions (hwd / in.)	3.5 x 17.5 x 21.76	
Stepdown Transformer Height (mm)	89	
Stepdown Transformer Width (mm)	445	
Stepdown Transformer Depth (mm)	553	
Stepdown Transformer Weight (kg)	32.93	
Stepdown Transformer Weight (lbs.)	72.6	
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.)	8.75 x 17.5 x 35.5	
UPS Power Module Weight (kg)	56.79	
UPS Power Module Weight (lbs.)	125.19	
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	5 to 95%, non-condensing	
AC Mode BTU / Hr. (Full Load)	1300	
AC Mode Efficiency Rating (100%	>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="//www.tripplite.com/network-interface-card-for-select-tripp-lite-ups-&lt;br&gt;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 Local software at https://www.tripplite.com/poweralert
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)
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)
High Voltage Transfer to Battery Power (Setpoint)	275V
SPECIAL FEATURES	
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 UPS power module; Hot swappable batteries; Manual bypass switch; 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
STANDARDS & COMPLIANCE	
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	UPS POWER MODULE: Series Number (s) AG-0357; Safety Standards (Canada) CAN/CSA-C22.2 No. 107.3-14 (3rd Ed)+Gl1; 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; INCLUDED BYPASS PDU: Series Number (s) AG-03DD; Safety Standards (Canada) CAN/CSA-C22.2 No. 107.3-14 (3rd Ed)+Gl1; 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; INCLUDED 6KVA 120V TRANSFORMER: Series Number (s) AGAC7579; Agency Standard Tested UL 1778: 2014 R8.15 (5TH EDITION); Canadian Approvals CAN/CSA-C22.2 NO. 107.3-14; EMI Approvals CLASS A
WARRANTY	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 <a class="insuranceLink" href="//www.tripplite.com/support/insurance-policy">Ultimate Lifetime Insurance</a>



Tripp Lite 1111 W. 35th Street Chicago, IL 60609 USA Telephone: 773.869.1234 www.tripplite.com

© 2021 Tripp Lite. All rights reserved. All product and company names are trademarks or registered trademarks of their respective holders. Use of them does not imply any affiliation with or endorsement by them. Tripp Lite has a policy of continuous improvement. Specifications are subject to change without notice. Tripp Lite uses primary and third-party agencies to test its products for compliance with standards. See a list of Tripp Lite's testing agencies: https://www.tripplite.com/products/product-certification-agencies