# Smart Online Expandable Rack / Tower UPS System

Online, double-conversion protection for mission critical applications



#### Model #: SU6000RT3U

- 6000VA online 9U rack / tower UPS (3U Power Module + 3U Step-down Transformer + 3U Battery Pack)
- Enhanced serial communications ports, SNMP/Web card slot and EPO jack
- Maintains 208 and simultaneous 120V output +/-2% during brownouts to 156 and overvoltages to 276V
- Fault tolerant manual and auto bypass modes
- Expandable runtime with optional BP240V10RT3U or BP240V32 battery packs
- ▶ \$250,000 Ultimate Lifetime Insurance (USA, Puerto Rico & Canada only)

Enterprise Assistance

E-mail us your critical extended run application requirements for large kVA and extended run UPS Systems and we will research the ideal solution and provide a custom configuration.

Contact a Tripp Lite Product Specialist

#### DESCRIPTION

Tripp Lite 6kVA Smart Online RM UPS - 6000VA. The SU6000RT3U on-line, double-conversion UPS protects server, networking or telecommunications equipment from blackouts, voltage fluctuations and surges in a compact tower / rackmount housing. In a rack configuration, the power module, step-down transformer, and battery pack occupy only 3 rack spaces each (9U total). Upright tower placement of entire system supported with included tower stands. Large capacity 6000VA/4200 watt power module double-conversion technology converts raw input AC to DC, then resynthesizes it back to perfect sine wave AC output within 2% of user-selectable 208V and 120V AC output voltages. Frequency regulation locks output power to 50/60Hz (+/-0.2 Hz), removing harmonic distortion, fast electrical impulses and other hard-to-solve power problems not addressed by other UPS types. Perfectly regulated, continuous sine wave output with zero transfer time offers guaranteed uptime and compatibility with all equipment types. Hardwire input and output connections support a variety of permanent or PDU style power connections. Battery support can be extended through the addition of external battery packs (part# BP240V10RT3U or BP240V32). Includes slot for internal SNMP/WEB card, plus DB9 contact-closure, and DB9 enhanced serial monitoring ports for unattended shutdown, remote control and monitoring of UPS system and power data.

## **KEY BUYING POINTS**

- True on-line, double conversion UPS provides pure, sine wave AC output at all times
- Maintains continuous operation through blackouts, voltage fluctuations and surges with zero transfer time
- Removes harmonic distortion, electrical impulses, frequency variations and other hard to solve power problems
- 6000VA / 4200 watt power capacity with hardwire input / output connections
- Accepts input voltages between 156 and 276, regulating output within 2% of selectable 208 and 120V AC output
- Standard included 3U battery pack provides 37 minutes runtime at half load (3000VA) and 15 minutes at full load (6000VA)
- Expandable runtime with multiple external battery packs (part# BP240V10RT3U or BP240V32)
- Innovative design makes unit adaptable for rackmount, tower, or stacking applications
- Power module and battery pack require only 3 rack spaces each (9U total rack space usage)
- DB9 serial port for network interface; SNMP compatible
- Slot for optional SNMP/web card SNMP/Web card for accessory slot (SNMPWEBCARD)

- PowerAlert unattended shutdown software and 6 ft. network cable included
- Fault tolerant auto-bypass maintians continuous utility output to connected equipment, even in cases where the UPS is overloaded or suffers an internal failure that requires service
- Manual bypass switch on the transformer module allows users to disconnect, remove, and replace the power module while maintaining continuous utility power to connected equipment
- Diagnostic LEDs
- Mounting hardware included with each 3U module for 4 post rackmount installation, 2 post telecom rack compatible with separate purchase 2POSTRMKITWM accessory (3 required)
- Includes RJ11 EPO (emergency power off) port and interconnection cable
- \$250,000 Ultimate Lifetime connected equipment Insurance (USA & Canada Only)
- 2 year manufacturers product warranty

## TYPICAL APPLICATIONS

• Ideal for protection of critical 208V and 120V equipment in server rooms, internetworking closets and telecommunications systems in rackmount or tower applications. Common applications include corporate or departmental servers, workstations, hubs, routers, bridges, CAD/CAM workstations, concentrators, IP telephony and traditional PBX switching systems.

# **OPTIONS & ACCESSORIES**

- SNMP accessories: SNMPWEBCARD, ENVIROSENSE
- External battery pack: BP240V10RT3U, BP240V32
- AS400/iSeries Shutdown Cable Kit: AS400 CABLE KIT
- Tower Stands: 2-9USTAND
- Dataline protectors: <u>DNET1</u>, <u>DTEL2</u>, <u>DCATV</u>
- Input line cord <u>SU30ACORD</u> enables plug in connection to L6-30 208V 30A wall socket for UPS systems supporting hardwire input
- Two Post Rackmount Kit: 2POSTRMKITWM (3 required)
- Extended warranties: 3 Year WEXT3-SU6000, 5 Year WEXT5-SU6000
- Corded backplate outlet kit: <u>SUPDM12</u>, <u>SUPDM13</u>, <u>SUPDM15</u>, <u>SUPDM16</u>
- Start-up service plus on-site warranties: 2 Year WOS2-6K, 3-Year WOS3-6K, 5 Year WOS5-6K
- Start-up service only: WSTRTUP-6-10K

## PACKAGE INCLUDES

- SU6000RT3U system includes 1 3U power module, 1 3U step-down isolation transformer and 1 3U battery pack
- PowerAlert UPS management software and complete cabling
- Mounting hardware to support each 3U module in 4 post rackmount enclosures / tower stands
- Warranty information
- Instruction manual

# COMPLETE SPECIFICATIONS

#### SYSTEM OVERVIEW

System overview:

Online, double conversion rack / tower UPS system continuously maintains near-perfect output power for critical internetworking and telecommunications equipment. Uses only 9 rack spaces (9U) in EIA standard rackmount configuration, with full support for upright tower and stacking applications. Completely regenerates input power into perfectly regulated sine wave output free of harmonic distortion, fast electrical impulses and frequency fluctuations. Simultaneously compatible with North American 208 and 120V applications. Maintains output within 2% of nominal during brownouts to 156 and overvoltages to 276V. Supports enhanced monitoring of UPS and line power conditions via DB9 serial port, included PowerAlert monitoring software and complete cabling. Includes slot for SNMPWEBCARD. Hardwire input / output connections supported. Runtime is expandable with BP240V10RT3U or BP240V32 battery packs.

Voltage compatibility: 208V AC Frequency compatibility: 50/60Hz

**OUTPUT** 

Output volt amp capacity (VA): 6000

Output watt capacity (watts): 4200

Output nominal voltage: 208V & 120V AC

Output voltage regulation: Maintains pure sine wave output at all times, regulated within 2% of selected nominal output

voltage, less than 5% total harmonic distortion

Output frequency regulation: Regulates line frequency to 50/60Hz +/- 0.05Hz

Outlet quantity / type: Hardwire

Overload protection: Resettable 40A circuit breaker

**INPUT** 

**Maximum input amps:** 30A / 4700 watts max.

Input connection type: Hardwire

Recommended electrical service: 30A 208V

**BATTERY** 

Full load runtime: Included batteries — 15 min (6000VA)

add 1 BP240V10RT3U — 37 min.

Half load runtime: Included batteries — 37 min. (3000VA)

Add 1 BP240V10RT3U — 79 min.

**Expandable battery runtime:** Supports extended runtime with optional external battery pack BP240V10RT3U (multi-pack

compatible)

DC system voltage: 240 V DC

**Typical battery lifespan:** 3-6 years, depending on usage

Battery recharge rate: 2-4 hours to 90%

**VOLTAGE REGULATION** 

Voltage regulation description: On-line, double-conversion process give this UPS the ability to maintain output voltage within

+/-2% of selected nominal voltage at all times

Overvoltage correction: Maintains continuous operation without using battery power during overvoltages to 276V AC,

regulating output within 2% of selected nominal

Brownout correction: Maintains continuous operation without using battery power during brownout / undervoltage

conditions to 156VAC, regulating output within 2% of selected nominal

**LEDS ALARMS & SWITCHES** 

Front panel LEDs: 6 LED DISPLAY: line power, bypass, inverter, charger, output AC and battery operation.

SELECTABLE LCD DISPLAY: input/output voltage, Hz, battery voltage and charge level and detailed warnings regarding all major UPS functions. LED/LCD display panel easily rotates

for viewing in rackmount or tower configurations.

Alarms: Multi-function audible alarm offers notification of UPS start, backup operation, low battery,

overload, UPS fault, inverter fault, DC bus fault, overtemperature, remote shutdown,

shutdown imminent and shutdown complete

Switches: Includes main power off/on switch, plus 2 switches to set and execute scrollable LCD

functions

**SURGE / NOISE SUPPRESSION** 

AC suppression response time: Instantaneous

EMI / RFI AC noise suppression: Yes

**PHYSICAL** 

Shipping weight (lbs): 323
Shipping weight (kg): 146.6

Unit weight (lbs): Power Module: 41.8 lbs., Battery Pack: 136.5 lbs., Step-down Transformer: 90 lbs.

Unit weight (kg): Power Module: 18kg, Battery Pack: 61kg, Step-down Transformer: 41kg

Unit Dimensions (HWD/in): Power Module 5.14 x 17.5 x 22.5, Battery Pack 5.14 x 17.5 x 23.5, Step-down Transformer

5.14 x 17.5 x 26 (Step-down transformer max depth is 24 inches when compatible SUPDM

backplate is used)

Unit Dimensions (HWD/cm): Power Module 13.1 x 44.5 x 57.2, Battery Pack 13.1 x 44.5 x 57.2, Step-down Transformer

13.1 x 44.5 x 66

Material of construction: Steel

Form factors supported: Rack/Tower (9U)

Cooling method: Built-in cooling fan

Battery Access: User replaceable, hot swappable external battery pack

**ENVIRONMENTAL** 

Operating Temperature: +32 to +104 degrees Fahrenheit

0 to +40 degrees Celsius

Storage Temperature: +5 to +122 degrees Fahrenheit

-15 to +50 degrees Celsius

**Relative Humidity:** 0 to 95%, non-condensing

**COMMUNICATIONS** 

Network monitoring port: Includes 2 built-in DB9 monitoring ports (1-RS232 / 1-contact closure)

Software and cabling included: Includes PowerAlert UPS monitoring software for all common network and standalone

operating systems. Cabling included.

**SNMP compatibility:** Built-in accessory slot accommodates internal SNMP / Web card and other network

accessories

LINE / BATTERY TRANSFER

Transfer time from line power to battery

mode:

Zero, online UPS continuously converts incoming AC to DC, then back to AC. When line power is interrupted, UPS maintains continuous output from battery reserves with absolutely

no disruption in output AC power.

Low voltage transfer to battery power: Maintains continuous operation during undervoltages as low as 156VAC. Below this point,

output is maintained utilizing battery reserves.

High voltage transfer to battery power: Maintains continuous operation during overvoltages to 276VAC. Above this point, output is

maintained utilizing battery reserves.

**CERTIFICATIONS** 

Certifications: UL1778 (USA), cUL (Canada), CE (Europe), Class A (emissions), NOM (Mexico), GOST,

IRAM, SASO

WARRANTY

Optional coverage: 3 year, 5 year, next day and on-site warranty coverage available for select opportunities -

contact Tripp Lite

**Product warranty:** 2 year product warranty

Connected equipment insurance (USA and

Canada Only):

\$250,000 connected equipment insurance (USA and Canada only)

**SPECIAL FEATURES** 

EPO port: Includes dedicated EPO (emergency power off) interface and cabling

Cold Start: Yes, inverter can be "cold started" to enable temporary AC output during a power failure

Appearance: Attractive black steel rackmount housing

**BATTERY PACK ACCESSORY (optional)** 

Battery Pack Accessory (optional):

BP240V10RT3U or BP240V32 (optional)

The policy of Tripp Lite is one of continuous improvement.

Specifications are subject to change without notice.

Therefore, your product may vary slightly from what is currently listed.



Tripp Lite World Headquarters 1111 W. 35th Street Chicago, IL 60609 USA

> Customer Support (773) 869-1234

© 2006 Tripp Lite. All Rights Reserved.