



## Model #: SU6000RT4U

# SmartOnline Hot-Swappable Modular UPS System - On-line, double-conversion protection for mission critical applications



## **Highlights**

6000VA / 6kVA on-line, double-conversion, extended run, 4U all-in-one rack / tower UPS

Maintains dual 208/120 or 240/120V output +/-3% during brownouts and overvoltages (4 wire split-phase input)

Simultaneous use HID compliant USB port, serial port, SNMP/Web card slot and EPO interface - front panel LCD digital display for real-time site electrical and detailed UPS operating parameters

Detachable plug & outlet panel with auto/manual bypass and fault tolerant design enables hot-swap UPS replacement without powering off connected equipment

Expandable runtime with optional BP192V12-3U external battery packs \$250,000 Ultimate Lifetime Insurance (USA, Puerto Rico & Canada only)

#### **Description**

Tripp Lite 6kVA SmartOnline Hot-Swappable Modular Rack/Tower UPS. 6000VA on-line, double-conversion UPS for server, network and telecommunications equipment. Maintains battery-derived AC output during blackouts with active, full-time power conditioning. Fault-tolerant auto-bypass prevents unexpected service interruptions during overload or internal fault conditions. Single all-in-one housing installs in 4 rack spaces (4U). Upright tower installation with optional 2-9USTAND accessory. 2 post rackmount installation with optional 2POSTRMKITWM. Full-time sine wave output within 3% of selectable 208/120 or 240/120V AC. Corrects brownouts and overvoltages from 65V to 140V (L-N). Expandable runtime with optional BP192V12-3U rackmount external battery packs. Converts raw input from AC to DC, then back to perfect 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. Network-grade AC surge and noise suppression. Network management interfaces include combination RS-232 enabled and contact closure serial port, enhanced USB port and SNMPWEBCARD slot. Includes USB and DB9 serial ports. Built-in DB9 port offers both enhanced RS-232 enabled monitoring data, plus contact closure monitoring ability. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X. Supports simultaneous detailed monitoring of equipment load levels, self-test data and utility power conditions via all 3 network interfaces. Includes PowerAlert monitoring software and complete cabling. Emergency Power Off (EPO) interface. Front panel LEDs and LCD readout with scroll controls support visual monitoring of all major UPS functions. LED/LCD display panel easily rotates for viewing in rackmount or tower configurations. Audible alarm. Self test. 4-post rackmount accessories. L14-30P split phase 4 wire plug-in connection: two L6-30R, two L6-20R and eight 5-15/20R output receptacles. Input cord and outlets are mounted on a detachable backplate with manual bypass switch to enable hot-swappable UPS replacement without powering off connected equipment. Optional SUPDM56HW installable backplate accessory enables hardwire input-output connections. Optional external Power Distribution Unit (PDU) options available. Internal batteries and optional external battery packs are field replaceable and hot swappable. Attractive all-black color scheme. 2-year warranty and \$250,000 connected equipment insurance; extended warranty and service contracts available.

#### Applications

Ideal for protection of sensitive electronics in any application calling for upright tower or 19-inch rackmount UPS protection. Common applications include any mix of servers, workstations, hubs, routers, concentrators, IP telephony and traditional PBX switching systems.

Package Includes

SU6000RT4U UPS System (with SUPDMB56 detachable PDU module)

USB, DB9 and EPO cabling

Rackmount installation kit for 4 post rack enclosures

Owner's manual and warranty information

#### **Features**

True online, double-conversion UPS provides pure, full-time sine wave AC output free of surges, voltage fluctuations and line noise 6000VA/4200 watt output power capacity with dual voltage output of 208/120 or 240/120V

4U all-in-one high power density housing supports rackmount installation in only 4 rack spaces

Dual conversion UPS actively converts raw input from AC to DC, then back to perfect 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

Input cord and outlets are mounted on a detachable backplate with manual bypass switch to enable hot-swappable UPS replacement without powering off connected equipment

Optional SUPDM56HW installable backplate accessory enables hardwire input-output connections

Provides perfectly regulated, sine wave output power free of line noise, transient surges and frequency variation for the most efficient operation of critical servers, networking and telecommunications equipment

Maintains output within 3% of selected 208/120 or 240/120V nominal voltage during brownouts and overvoltages

Supports connected equipment during blackouts for 20/8 minutes at half/full load levels, runtime is further expandable with optional external battery packs

Network interfaces support simultaneous communications via DB9 port, USB port and SNMPWEBCARD slot

Included PowerAlert UPS monitoring software supports safe unattended shutdown, monitoring and control via local connected servers, plus any number of additional servers over IP

Communications ports support on-battery, low-battery, power-restored, AC-voltage, DC-voltage, output current monitoring, battery charge current, battery capacity, AC line frequency, timed inverter shutoff, activate self-test and output power control

Includes USB and DB9 serial ports. Built-in DB9 port offers both enhanced RS-232 enabled monitoring data, plus contact closure monitoring ability. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X.

Built-in Emergency Power Off (EPO) interface with cable

Includes 12 built-in output receptacles (2 L6-30R, 2 L6-20R, 8 NEMA 5-15/20R)

L14-30P split phase, 4 wire plug-in connection (featured on included detachable PDU). Optional SUPDM56HW hardwire input/output PDU available separately

Front panel LEDs and LCD readout with scroll button enables visual confirmation of all major UPS functions and current site electrical conditions Front panel switches enable power on/off control, self-test and alarm cancel functions

Included adjustable mounting rails support installation in 4 post 19 inch rack enclosures

Optional 2-9USTAND set of tower stands supports upright tower installation

Optional 2POSTRMKITWM accessory enables 2 post rackmount installation

UPS ships fully assembled in full compliance with DOT regulations, no time consuming connection of internal batteries by user is required Fault-tolerant auto-bypass maintains continuous utility output to connected equipment, even in cases where the UPS is overloaded or suffers an internal failure that requires service

Detachable PDU with built-in manual bypass switch enables hot-swappable UPS replacement without powering off connected equipment 2 year manufacturer's product warranty, \$250,000 Ultimate Lifetime Insurance (USA & Canada only)

### **Specifications**

SYSTEM OVERVIEW		
Voltage compatibility	208/120 or 240/120V split phase, 4 wire	
Frequency compatibility	60Hz	
OUTPUT		
Output VA	6000 (240v) / 5400 (208v)	
Output watts	4200	
Output nominal voltage	208/120 or 240/120V	
Output voltage regulation	Maintains pure sine wave output at all times, regulated within 3% of selected nominal output voltage, less than 5% total harmonic distortion	

Output frequency regulation	Regulates line frequency to 60Hz +/- 0.05Hz	
Outlet quantity / type	2 NEMA L6-30R, 2 NEMA L6-20R and 8 NEMA 5-15/20R	
Overload protection	Resettable circuit breaker	
INPUT		
Maximum input amps	24A	
Input connection type	NEMA L14-30P split phase, 4 wire	
Input cord length	10 ft / 3m	
Recommended electrical service	30A split phase, 4 wire 208/120 or 240/120V	
BATTERY		
Full load runtime	8 minutes (6000VA) - expandable	
Half load runtime	20 minutes (3000VA) - expandable	
Expandable battery runtime	Yes, with optional BP192V12-3U	
DC system voltage	192V	
Typical battery lifespan	4-6 years (typical)	
Battery recharge rate	4-6 hours to 90% for internal batteries	
Replacement Battery Cartridge	RBC9-192	
VOLTAGE REGULAT	ION	
Voltage regulation description	Maintains 208/120 or 240/120V output +/-3%	
Overvoltage correction	Corrects overvoltages as high as 140V (L1-N:L2-N)	
Brownout correction	Corrects brownouts as low as 65V (L1-N:L2-N)	
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. 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. Battery Charge level switch allows the charger output to be adjusted to a higher charge rate when external battery packs are added.	
SURGE / NOISE SUP	PRESSION	
AC surge suppression	Conforms to IEEE 587 / ANSI C62.41 specifications	
AC suppression response time	Instantaneous	
EMI / RFI AC noise suppression	Yes	
PHYSICAL		
Shipping weight (lbs)	189.2	

Shipping weight (kg)	85.9
Shipping Dimensions (HWD/in)	13.25 x 37 x 23
Shipping Dimensions (HWD/cm)	33.7 x 94 x 58.4
Unit weight (lbs)	149.6
Unit weight (kg)	67.9
Unit Dimensions (HWD/in)	7 x 17.5 x 30.75
Unit Dimensions (HWD/cm)	17.8 x 44.5 x 78.1
Material of construction	Steel
Form factors supported	Rack (4U)
Cooling method	Fan
Battery Access	User replaceable, hot swappable internal batteries and external battery packs
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
Line mode BTU/hr. (Max.)	1593 BTU/hr.
Operating Elevation (ft)	0-3000m (0 to 10,000 ft.)
Audible Noise	60 dBA at front side 1 meter
COMMUNICATIONS	
Network monitoring port	Includes USB and DB9 serial ports. Built-in DB9 port offers both enhanced RS-232 enabled monitoring data, plus contact closure monitoring ability. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X.
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 TRA	ANSFER
Transfer time from line power to battery mode	Zero, on-line 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 65V (L1-N:L2-N). Below this point, output is maintained utilizing battery reserves.
High voltage transfer to battery power	Maintains continuous operation during overvoltages to 140V (L1-N:L2-N). Above this point, output is maintained utilizing battery reserves.
CERTIFICATIONS	
Certifications	Tested to UL1778 (USA), CSA C22.2 No. 107.3 (Canada), Class A (Emissions), NOM (Mexico)
WARRANTY	
Product warranty	2 year product warranty

Connected equipment insurance (USA and Canada Only	\$250,000 connected equipment insurance (USA and Canada only)	
Optional coverage	3 year, 5 year, next day and on-site warranty coverage available	
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)	BP192V12-3U	

More information, including related products, owner's manuals, and additional technical specifications, can be found online at www.tripplite.com/products/model.cfm?txtModelID=3184.

©2008 Tripp Lite. All Rights Reserved.