

# Model #: SU6000RT4U

SmartOnline 6kVA On-Line Double-Conversion UPS, 4U Rack/Tower, 208/120V or 240/120V NEMA outlets, Split-phase input



## **Highlights**

- Completely user hot-swappable—no service call or technician needed
- Protects rackmount servers, telecom systems and other networking equipment with true on-line operation, pure sine wave output and zero transfer time to battery
- 12 AC outlets (8 5-15/20R; 2 L6-20R; 2 L6-30R)
- 6kVA/4200W capacity in 4U form factor with power module and independent, detachable PDU
- Hot-swappable power and battery modules
- 20-minute half-load runtime, 8-minute full-load; expandable runtime with external battery packs
- Front panel LEDs with detailed LCD monitoring and control screen
- USB, RS232 and SNMP communication ports with included PowerAlert software for complete network power management and control
- \$250,000 Ultimate Lifetime Insurance; 2-year warranty

### **Description**

Featuring true on-line operation with pure sine wave output, zero transfer time to battery and complete UPS replacement capability with no downtime, the SU6000RT4U provides the highest level of protection available for mission-critical equipment from power outages, voltage fluctuations and transient surges. It converts incoming AC power to DC, and re-converts it back to filtered AC output with a pure sine wave, isolating connected components from all power problems. The SU6000RT4U has a 6kVA/4200W capacity, NEMA L14-30P 4-wire split-phase input and 12 total AC outlets (8 5-15/20R; 2 L6-20R; 2 L6-30R).

With its detachable PDU, the SU6000RT4U is easily hot-swappable by a user of any skill set—no need for lengthy and expensive service calls, and no downtime if a repair or battery replacement is needed. In bypass mode, the PDU passes power to equipment without the use of the power and battery modules, allowing them to be removed while keeping your application in operation.

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 SU6000RT4U's runtime can be expanded with optional external battery packs.

The SU6000RT4U features a highly efficient (94%) economy mode setting that can significantly reduce a facility's energy costs by minimizing heat output, reducing cooling requirements and consuming less electricity.

An LCD display with LED indicators enables IT personnel to monitor operating modes and conditions. The LCD/LED panel rotates for viewing in horizontal rack or vertical tower installations and includes an audible alarm that signals various conditions.

The SU6000RT4U features a USB port and a DB9 port that, when used with Tripp Lite's included PowerAlert software, provide comprehensive network power monitoring and control. An optional SNMPWEBCARD accessory can enable the UPS to operate as an IP managed device.

The unit requires only 4U of rack space in a standard rack enclosure and can be installed in a 2-post rack using the 2POSTRMKITHD accessory, or in a tower configuration with the 2-9USTAND accessory.

The SU6000RT4U comes with \$250,000 Ultimate Lifetime Insurance coverage for connected equipment and a 2-year warranty.

#### 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 on-line, 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 and SUPDMB568HW installable backplate accessories enable 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
- Some external battery configurations require the use of Tripp Lite's External Battery Configuration Software (see manual)
- 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 2POSTRMKITHD 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 electronic bypass maintains utility output during a variety of UPS fault conditions
- Detachable PDU with built-in manual bypass switch enables hot-swappable UPS replacement without powering off connected equipment
- \$250,000 Ultimate Lifetime Insurance (USA and Canada Only)

### **Specifications**

OUTPUT	
Output Volt Amp Capacity (VA)	6000
Output kVA capacity (kVA)	6
Output Watt Capacity (watts)	4200
Output kW capacity	4.2
Output power factor	0.7
Output Capacity Details	6,000 VA (240V) / 5400 VA (208V) / 4200 watts (208/240V)
Crest Factor	3:1
Nominal Output Voltage(s) Supported	120V; 208V; 240V

Nominal Voltage details	240/120 or 208/120 split phase output
Frequency compatibility	60 Hz
Output voltage regulation (line mode)	+/- 3%
Output voltage regulation (Economy line mode)	+/- 10%
Output voltage regulation (Battery mode)	+/- 3%
Built-in UPS output receptacles	8 5-15/20R outlet(s); 2 L6-20R outlet(s); 2 L6-30R outlet(s)
Output circuit breaker	20A branch rated breakers (x4) protect 2 5-15/20R outlets each, 20A double pole breakers (x2) protect one L6-20R each, L6-30R outlets are unbreakered
Output AC waveform (AC mode)	Sine wave
Output AC waveform (battery mode)	Pure Sine wave
INPUT	
Rated input current (at maximum load)	24A
Nominal Input Voltage(s) Supported	208V AC / 120V AC (4 wire split single phase); 240V AC /120V AC (4 wire split single phase)
UPS input connection type	L14-30P
UPS input connection description	4 wire split-phase input (L1, L2, N, G)
UPS Input cord length (ft.)	10
UPS Input cord length (m)	3
Recommended Electrical Service	30A 208/120V Split Phase
Input cord length (m)	3
BATTERY	
Full load runtime (minutes)	8 min. (4200w)
Half load runtime (minutes)	20 min. (2100w)
Expandable battery runtime	Supports extended runtime with optional external battery packs

DC system voltage (VDC)  Battery recharge rate (included batteries)  Replacement battery cartridge (internal UPS battery replacement)  Battery Access Front panel battery access door  Battery replacement description  VOLTAGE REGULATION  Voltage regulation description  Overvoltage correction  Overvoltage correction  Undervoltage correction  LEDS ALARMS & SWITCHES  LED Indicators 6 LEDs indicate line power, online mode, economy/bypass mode, on-batter screen offers additional information and control options  Alarm cancel operation  Switches  Includes main power off/on switch, plus 2 switches to set and execute scrol switch featured on the detachable PDU allows for complete removal of the disrupting power to connected loads. Battery Charge level switch allows the charge rate when external battery packs are added.  SURGE / NOISE SUPPRESSION  Instantaneous	,
rate (included batteries)  Replacement battery cartridge (internal UPS battery replacement)  Battery Access Front panel battery access door  Battery replacement description Hot-swappable, user replaceable batteries  VOLTAGE REGULATION  Voltage regulation description Online, double-conversion power conditioning description  Overvoltage correction 3% output voltage regulation during overvoltages to 140 (measured L1-N : undervoltage correction 2% output voltage regulation during undervoltages to 65 (measured L1-N : necessary correction but the power of the power, online mode, economy/bypass mode, on-batter screen offers additional information and control options  Alarms Unique audible alarms for all major UPS, environmental and power conditions  Alarm cancel operation Includes main power off/on switch, plus 2 switches to set and execute scrol switch featured on the detachable PDU allows for complete removal of the disrupting power to connected loads. Battery Charge level switch allows the charge rate when external battery packs are added.  SURGE / NOISE SUPPRESSION  UPS AC Instantaneous	,
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UPS AC Instantaneous	UPS during routine maintenance without
response time	
EMI / RFI AC noise yes suppression	
AC suppression response time Instantaneous	
PHYSICAL	
Installation form factors supported with included accessories  4 post 19 inch rackmount (mounting rail kit included)	
Installation form factors supported with optional accessories  2 post rackmount (2POSTRMKITWM); Tower (2-9USTAND)	
Primary form factor Rackmount	

UPS / Power Module dimensions in primary form factor (height x width x depth / inches)	7 x 17.5 x 30.8
UPS / Power Module dimensions in primary form factor (height x width x depth / cm)	17.8 x 44.4 x 78.1
Installed whole system maximum rack depth (inches)	30.8
Installed whole system maximum rack depth (cm)	78.1
Installed whole system total rack space height (rack spaces)	4U
Secondary form factor	Tower (requires 2-9USTAND)
UPS / Power Module weight (lbs)	149.6
UPS / Power Module weight (kg)	67.9
UPS dimensions details	4U UPS with internal batteries
UPS Shipping dimensions (height x width x depth / inches)	13.2 x 37 x 23
UPS Shipping dimensions (height x width x depth / cm)	33.7 x 94 x 58.4
Shipping weight (lbs)	189.2
Shipping weight (kg)	85.9
UPS housing material	Steel
Cooling method	Fan
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	0 to 95%, non-condensing
AC mode BTU / hr. (full load)	1586.7
Battery mode BTU /	1412.3

Operating Elevation (ft)	0-3000m (0 to 10,000 ft.)
Audible Noise	60 dBA at front side 1 meter
Operating Elevation (m)	0-3000 m
COMMUNICATIONS	
Communications interface	USB (HID enabled); DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface
Network monitoring port description	RS232 and contact closure communications are supported on one DB9 port
PowerAlert software	Included
Communications cable	USB and DB9 cabling included
LINE / BATTERY TRAI	NSFER
Transfer time	No transfer time (0 ms.) in online, double-conversion mode
Low voltage transfer to battery power (setpoint)	65V (L1-N:L2-N)
High voltage transfer to battery power (setpoint)	140V (L1-N:L2-N)
SPECIAL FEATURES	
Cold Start (startup in battery mode during a power failure)	Cold-start operation supported
High availability UPS features	Automatic inverter bypass; Manual bypass switch; Detachable hot-swap PDU; Hot swappable UPS power module; Hot swappable batteries
Green & high efficiency features	High efficiency economy mode operation; Schedulable daily hours of economy mode operation
CERTIFICATIONS	
UPS Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Tested to NOM (Mexico); Meets FCC Part 15 Category A (EMI)
WARRANTY	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 Ultimate Lifetime Insurance

# **Related Items**

## **Optional Products**

Related Model	Description	Qty.
2-9USTAND	Enables Tower Placement of Rackmount UPS Systems	1
AS400CABLEKIT2	Power Management Tools - UPS Communication Cable Kit for System i / AS400 / iSeries Servers	1

SNMPWEBCARD	For remote monitoring and control via SNMP, Web, or Telnet.	1
ENVIROSENSE	Monitors temperature, humidity and contact-closure inputs. (Requires SNMPWEBCARD or switched PDU.)	1
SUPDM56HW	SUPDM56HW - UPS Accessory - Hardwire PDU Module	1
BP192V557C-1PH	External battery pack for use with select Tripp Lite UPS Systems	1
BP192V787C-1PH	External battery pack for use with select Tripp Lite UPS Systems	1
BP192V1037C-1PH	External battery pack for use with select Tripp Lite UPS Systems	1
BP192V1407C-1PH	External battery pack for use with select Tripp Lite UPS Systems	1
DTEL2	Network Surge Suppressor - Essential protection for data and communication lines	1
DCATV	Network Surge Suppressor - Essential protection for TV/VCR coaxial lines	1
DNET1	Network Surge Suppressor - Essential protection for data and communication lines	1
SUPDMB568HW	SUPDMB568HW - UPS Accessory - Hardwire PDU Module	1
WEXT3-SU6000	3-Year Extended Warranty - For SU6000 models	1
WEXT5-SU6000	5-Year Extended Warranty - For SU6000 models	1
BP192V12-3U	BP192V12-3U - External Battery Pack for UPS System	1
MODBUSCARD	For remote monitoring and control via MODBUS protocol	1
2POSTRMKITHD	Enables 2-Post Rackmount Installation of 3U and Larger UPS, Transformer and Battery Pack Components	1

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

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