SmartOnline 208/240 & 120V 6kVA 4.2kW Double-Conversion UPS, 4U Rack/Tower, Extended Run, Network Card Options, USB, DB9 Serial, Bypass Switch

MODEL NUMBER: **SU6000RT4U**











Highlights

- 6kVA / 6000VA / 4200W on-line double-conversion 4U rack/tower UPS, Sine Wave
- Included maintenance bypass switch enables live replacement of UPS with zero downtime
- Extended runtime options, Interactive LCD interface
- USB, RS232 and EPO ports; Slot for network management card options
- NEMA L14-30P 208/240V 60Hz input (4 wire split phase); L6-30R, L6-20R (208/240V) and 5-15/20R (120V) outlets

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

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 PowerAlert software, provides comprehensive network power monitoring and control. An optional network accessory card enables the UPS to operate as a network 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 (U.S., Canada, and Puerto Rico only) for connected equipment.

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 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
- Intelligent battery management system extends battery life
- 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 slot for network management card options
- Compatible with Tripp Lite UPS management card options TLNETCARD, WEBCARDLX, SNMPWEBCARD and MODBUSCARD
- 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
- USB & Serial ports enable data-saving unattended shutdown when used with Tripp Lite's PowerAlert software, available via FREE download from tripplite.eaton.com/products/power-alert
- 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).
- 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 (U.S., Canada, and Puerto Rico only)

Specifications

OVERVIEW	
UPC Code	037332125217
UPS Type	On-Line
INPUT	
Input Phase	Single-Phase
Rated input current (Maximum Load)	24A
Nominal Input Voltage(s) Supported	120/208V (Split phase L1,L2,N,G); 120/240V (Split phase L1,L2,N,G)
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)	3.1
Recommended Electrical Service	30A 208/120V Split Phase
Maximum Input Amps	24
Input Cord Length (m)	3
OUTPUT	
Output Capacity (VA)	6000
Output Capacity (kVA)	6
Output Capacity (Watts)	4200
Output Capacity (kW)	4.2
Output Capacity Details	6,000VA / 4200W (240V) / 5400VA / 4200W (208V); Supports up to 105% load continuously in double conversion mode, 106 to 125% for 3 minutes, 126 to 150% for 30 seconds; Loads over 150% trigger immediate bypass mode operation to support equipment directly from mains power; Double conversion mode is automatically restored as the overload is cleared
Power Factor	0.7
Crest Factor	3:1
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%
Output Circuit Breakers	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)	Pure Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
Nominal Output Voltage(s) Supported	120V; 208V; 240V
Output Receptacles	(8) 5-15/20R; (2) L6-20R; (2) L6-30R
Individually Controllable Load Banks	No
BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
Runtime Full Load (min.)	8 min. (4200w)
Runtime Half Load (min.)	20 min. (2100w)
Expandable Runtime	Yes
External Battery Pack Compatibility	BP192V12-3U ; BP192V5RT2U (limit 1); BP192V787C-1PH
DC System Voltage (VDC)	192
Battery Recharge Rate (Included Batteries)	Less than 6 hours from 10% to 80% (typical, full load discharge)
Battery Access	Front panel battery access door
Internal UPS Replacement Battery Cartridge	RBC9-192
Battery Replacement Description	Hot-swappable, user replaceable batteries
VOLTAGE REGULATION	
Voltage Regulation Description	+/-3% output voltage regulation in online, double-conversion mode
Overvoltage Correction	Corrects overvoltages to 140 (measured L1-N : L2-N)
Undervoltage Correction	Corrects undervoltages to 65 (measured L1-N : L2-N)
USER INTERFACE, ALERTS & CONTROLS	
Front Panel LCD Display	Selectable LCD display with scroll and selection buttons enables UPS control and detailed monitoring options; LED/LCD panel rotates for viewing in rack/tower formats
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.
Alarm Cancel Operation	Alarm cancel switch
Audible Alarm	Unique audible alarms for all major UPS, environmental and power conditions (see manual)
LED Indicators	6 LEDs indicate line power, online mode, economy/bypass mode, on-battery, charger and AC output status; LCD screen offers additional information and control options

SURGE / NOISE SUPPRESSION	
EMI / RFI AC Noise Suppression	Yes
AC Suppression Joule Rating	1810
AC Suppression Response Time	Instantaneous
PHYSICAL	
Primary Form Factor	Rackmount
Rack Height	4U
Cooling Method	Fan
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount
Installation Form Factors Supported with Optional Accessories	2 post rackmount (2POSTRMKITHD); Tower (2-9USTAND)
Maximum Device Depth (cm)	77.72
Maximum Device Depth (in.)	30.6
Maximum Device Depth (mm)	777
Minimum Required Rack Depth with External Battery Pack (cm)	87
Minimum Required Rack Depth with External Battery Pack (in.)	34.2
Minimum Required Rack Depth without External Battery Pack (cm)	87
Minimum Required Rack Depth without External Battery Pack (in.)	34.2
Primary UPS Depth (mm)	782
Primary UPS Height (mm)	175
Primary UPS Width (mm)	445
Shipping Dimensions (hwd / in.)	13.25 x 23.50 x 37.00
Shipping Dimensions (hwd / cm)	33.66 x 59.69 x 93.98
Shipping Weight (lbs.)	222.00
Shipping Weight (kg)	100.70
Unit Dimension Details	MINIMUM REQUIRED RACK DEPTH specifications refer to the internal FRONT RAIL to REAR DOOR dimension a compatible rack enclosure is required to accommodate for the UPS configuration described; All minimum required rack depth figures include any additional distance required to accommodate connected equipment plugs
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	17.50 x 44.45 x 78.23
UPS Power Module Dimensions (hwd, in.)	6.89 x 17.5 x 30.8
UPS Power Module Weight (kg)	67.86

UPS Power Module Weight (lbs.)	149.6
Mounting Details	4 post rackmount installation accessories included
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	0-95% non-condensing
AC Mode BTU / Hr. (Full Load)	1593
AC Economy Mode BTU / Hr. (Full Load)	914
AC Economy Mode Efficiency Rating (100% Load)	94%
Battery Mode Heat Dissipation (BTU/Hr) @ Full Load	1419
Operating Elevation	0-10000 ft. (0-3000 m)
Audible Noise	60 dBA at front side 1 meter
COMMUNICATIONS	
Network Management Cards	SNMPWEBCARD; TLNETCARD ; WEBCARDLX; MODBUSCARD ; RELAYIOCARD
Network Monitoring Port Description	RS232 and contact closure communications are supported on one DB9 port
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 and DB9 cabling included
Network Management Card Description	Network management card optional
Communications Interface	Contact closure; DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface; USB (HID enabled)
LINE / BATTERY TRANSFER	
Transfer Time	0 ms
Low Voltage Transfer to Battery Power (Setpoint)	65V (L1-N:L2-N)
High Voltage Transfer to Battery Power (Setpoint)	140V (L1-N:L2-N)
FEATURES & SPECIFICATIONS	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
High Availability UPS Features	Auto Probe Monitoring (requires WEBCARDLX); Automatic inverter bypass; Expandable battery backup; Hot swappable batteries; Hot swappable UPS power module; Manual bypass switch; On-Line/Double-Conversion; Remote management; Sine wave output; Surge/noise protection; Zero transfer time
Green Energy-Saving Features	High efficiency economy mode operation; Schedulable daily hours of economy mode operation

APPLICATIONS	
UPS Applications	Mission Critical Applications
WARRANTY & SUPPORT	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	$250,000 Ultimate Lifetime Insurance

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