

SmartOnline 208/240 & 120V 5kVA 3.8kW Double-Conversion UPS, 4U Rack/Tower, Extended Run, Network Card Options, USB, DB9 Serial, Bypass Switch

MODEL NUMBER: **SU5000RT4U**



Description

Tripp Lite 5kVA SmartOnline Hot-Swappable Modular Rack/Tower UPS. 5000VA 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 2POSTRMKITHD. 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 external battery packs. Dual-conversion UPS 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. Highly efficient operation in optional economy mode setting, saving BTU heat output and energy costs. Network-grade AC surge and noise suppression. Network management interfaces include combination RS-232 enabled and contact closure serial port, enhanced USB port and slot for network management card options. 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 mains power conditions via all 3 network interfaces. PowerAlert monitoring software is available via free download. 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. Includes NEMA L14-30P split phase 4 wire input plug and 12 total output receptacles (2 L6-30R, 2 L6-20R and 8 5-15/20R). Input cord and outlets are mounted on a detachable backplate with manual bypass switch to enable hot-swappable

Highlights

- 5kVA / 5000VA / 3800W 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 & 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) & 5-15/20R (120V) outlets

System Requirements

- Electrical Service: 125/250V, 4-wire, split phase, 30A
- Communication Interface: serial DB-9 or USB
- Compatible with all standard 19-in. equipment

Package Includes

- SU5000RT4U 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

UPS replacement without powering off connected equipment. Optional SUPDMB568HW detachable backplate accessory enables hardwire input-output connections to the UPS. Additional 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. \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only).

Features

- True on-line, double-conversion UPS provides pure, full-time sine wave AC output free of surges, voltage fluctuations and line noise
- 5000VA/3800 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
- 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 14/6 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 WEBCARDLX, SNMPWEBCARD, MODBUSCARD and RELAYIOCARD
- USB & Serial ports enable data-saving unattended shutdown when used with Tripp Lite's PowerAlert software, available via FREE download from www.tripplite.com/poweralert
- 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 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 (U.S., Canada, and Puerto Rico only)

Specifications

OVERVIEW	
UPC Code	037332126481
OUTPUT	
Output Volt Amp Capacity (VA)	5000
Output kVA Capacity (kVA)	5
Output Watt Capacity (Watts)	3800
Output kW Capacity (kW)	3.8
Power Factor	0.8
Crest Factor	3:1
Nominal Voltage Details	240/120V or 208/120V 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



Output Capacity Details	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
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
INPUT	
Rated input current (Maximum Load)	21A
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
Input Phase	Single-Phase
Input Cord Length (m)	3
BATTERY	
Full Load Runtime (min.)	6 min. (3800w)
Half Load Runtime (min.)	14 min. (1900w)
Expandable Battery Runtime	Supports extended runtime with optional external battery packs
External Battery Pack Compatibility	BP192V12-3U; BP192V5RT2U BP192V787C-1PH
DC System Voltage (VDC)	192
Battery Recharge Rate (Included Batteries)	Less than 6 hours from 10% to 80% (typical, full load discharge)
Internal UPS Replacement Battery Cartridge	 RBC9-192
Battery Access	Front panel battery access door
Battery Replacement Description	Hot-swappable, user replaceable batteries
Expandable Runtime	Yes
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 additional 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	
UPS AC Suppression Joule Rating	1810
UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
PHYSICAL	
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount
Included Mounting Accessory Description	Includes 4 post rackmount installation accessories
Installation Form Factors Supported with Optional Accessories	2 post rackmount (2POSTRMKITHD); Tower (2-9USTAND)
Primary Form Factor	Rackmount
UPS Power Module Dimensions (hwd, in.)	7 x 17.5 x 30.8
UPS Power Module Dimensions (hwd, cm)	17.78 x 44.45 x 78.23
Rack Height	4U
Maximum Device Depth (in.)	30.8
Maximum Device Depth (cm)	78.23
Minimum Required Rack Depth without External Battery Pack (cm)	91
Minimum Required Rack Depth with External Battery Pack (cm)	98
Minimum Required Rack Depth without External Battery Pack (in.)	35.75
Minimum Required Rack Depth with External Battery Pack (in.)	38.75
UPS Power Module Weight (lbs.)	149.6
UPS Power Module Weight (kg)	67.86



UPS Dimensions Details	Includes 4U UPS/power module plus SUPDMB56 detachable PDU with bypass; MAXIMUM DEVICE DEPTH specification refers to the whole UPS installed depth with bypass PDU installed
Shipping Dimensions (hwd / in.)	14.00 x 24.00 x 36.00
Shipping Dimensions (hwd / cm)	35.56 x 60.96 x 91.44
Shipping Weight (lbs.)	208.00
Shipping Weight (kg)	94.35
Cooling Method	Fan
UPS Housing Material	Steel
Maximum Device Depth (mm)	782
Primary UPS Height (mm)	178
Primary UPS Width (mm)	445
Primary UPS Depth (mm)	782
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)	1441
AC Economy Mode BTU / Hr. (Full Load)	827
Battery Mode BTU / Hr. (Full Load)	1283
AC Economy Mode Efficiency Rating (100% Load)	94%
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 Management Cards	SNMPWEBCARD; 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 Local software at http://www.tripplite.com/poweralert
Communications Cable	USB and DB9 cabling included
LINE / BATTERY TRANSFER	
Transfer Time	No transfer time (0 ms.) in online, double-conversion mode



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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; Hot swappable batteries; Hot swappable UPS power module; Manual bypass switch
Green Energy-Saving 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

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