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# Model #: SU5000RT4U

SmartOnline 5kVA On-Line Double-Conversion UPS, 4U Rack/Tower, 208/120V or 240/120V NEMA outlets, Split-phase input



## **Highlights**

- 5000VA / 5kVA / 3800W on-line double-conversion UPS
- 208/120V or 240/120V +/-3% output at 60Hz
- 4U Rack/Tower compatible; Hot-swappable power and battery modules
- USB, RS232 & EPO ports; support for SNMP/WEB card options
- Front panel LEDs with detailed LCD monitoring and control screen
- Expandable runtime with optional external battery packs
- NEMA L14-30P input (4 wire split phase); L6-30R, L6-20R & 5-15/20R outlets

### **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 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 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 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 mains 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. Includes

#### 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

#### **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
- Optional SUPDM56HW detachable backplate accessory enables hardwire input-output connections to the UPS

- 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
- 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
- Communication 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 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)	5000	
Output kVA capacity (kVA)	5	
Output Watt Capacity (watts)	3800	
Output kW capacity	3.8	
Output power factor	0.8	
Crest Factor	3:1	
Nominal Output Voltage(s) Supported	120V; 208V; 240V	
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%			
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)	21A			
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)	6 min. (3800w)			
Half load runtime (minutes)	14 min. (1900w)			
Expandable battery runtime	Supports extended runtime with optional external battery packs			
External battery pack compatibility	BP192V12-3U; BP192V557C-1PH; BP192V787C-1PH; BP192V1037C-1PH; BP192V1407C-1PH			
DC system voltage (VDC)	192			
Battery recharge rate (included batteries)	Less than 6 hours from 10% to 80%			

Replacement battery cartridge (internal UPS battery replacement)	RBC9-192			
Battery Access	Front panel battery access door			
Battery replacement description	Hot-swappable, user replaceable batteries			
VOLTAGE REGULATION	ON			
Voltage regulation description	Online, double-conversion power conditioning			
Overvoltage correction	3% output voltage regulation during overvoltages to 140 (measured L1-N : L2-N)			
Undervoltage correction	2% output voltage regulation during undervoltages to 65 (measured L1-N : L2-N)			
LEDS ALARMS & SWI	TCHES			
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			
Alarms	Unique audible alarms for all major UPS, environmental and power conditions (see manual)			
Alarm cancel operation	Alarm cancel switch			
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.			
SURGE / NOISE SUPP	RESSION			
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 (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)	1435.6
Battery mode BTU / hr. (full load)	1277.8
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	INE / BATTERY TRANSFER				
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
WEXT3-SU5000	3-Year Extended Warranty - For SU5000 UPS models	1
WEXT5-SU5000	5-Year Extended Warranty - For SU5000 UPS models	1
DNET1	Network Surge Suppressor - Essential protection for data and communication lines	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
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
SUPDMB568HW	SUPDMB568HW - UPS Accessory - Hardwire PDU Module	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=3138.

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