

## SmartOnline 208/240V 5kVA 3.5kW Double-Conversion UPS, 5U Rack/Tower, Extended Run, Network Card Options, DB9 Serial

## MODEL NUMBER: SU5000RT3UHV





#### Description

Tripp Lite 5kVA Smart Online RM 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. 3U power module and 2U battery pack install in 5 rack spaces. Full-time sine wave output within 2% of selectable 200/208/220/230/240V AC. Corrects brownouts to 156V and overvoltages to 276V. Frequency regulation locks output power to 50/60Hz (+/-0.2%)/Expandable runtime with optional rackmount external battery packs. Double-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. Networkgrade AC surge and noise suppression. Network management interfaces include 2 DB9 ports and slot for network management card options. Supports simultaneous detailed monitoring of equipment load levels, self-test data and utility 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. Audible alarm. Self test. 4-post rackmount accessories included; 2-9USTAND and 2POSTRMKITHD accessories available. L6-30P plugin connection; built-in L6-30 & L6-20 outlets. Power Distribution Unit (PDU) options supported. Fieldreplaceable, hot-swappable external battery packs. Attractive all-black color scheme. \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only).

#### Features

• True online, double-conversion UPS provides pure, full-time sine wave AC output free of surges, voltage fluctuations and line noise

### Highlights

- 5000VA / 5kVA / 3500 watt online double-conversion 5U rack/tower UPS
- 200/208/220/230/240V 50/60Hz output, high efficiency economy mode option
- Hot-swappable battery modules
- RS232 & EPO ports; slot for network management card options
- Front panel LEDs with detailed LCD monitoring and control screen
- Expandable runtime with optional external battery packs
- NEMA L6-30P input (3 wire); L6-30R & L6-20R outputs

#### **Package Includes**

- SU5000RT3UPM UPS Power Module
- BP240V5RT2U External Battery
  Pack
- DB9 Cable
- Mounting hardware to support each module in 4-post rackmount enclosures
- Warranty information
- Instruction manual



- 5000VA/3500 watt output power capacity compatible with 200-240V applications at 50/60 Hz
- 3U power module and 2U battery pack installs in any 19 inch rack enclosure using only 5 rack spaces
- Double 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-tosolve power problems not addressed by other UPS types
- 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
- Accepts input voltages between 156 and 276, regulating output within 2% of selected 200/208/220/230/240V nominal voltage
- 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
- Network interfaces support simultaneous communications via 2 <u>DB9</u> ports and slot for network management card options
- Compatible with Tripp Lite UPS management card options <u>TLNETCARD</u>, WEBCARDLX, <u>SNMPWEBCARD</u>, <u>MODBUSCARD</u> and <u>RELAYIOCARD</u>
- Serial port enables data-saving unattended shutdown when used with Tripp Lite's PowerAlert software, available via FREE download from <u>www.tripplite.com/poweralert</u>
- Built-in Emergency Power Off (EPO) interface with cable
- Includes 4 built-in output receptacles (2 L6-30R, 2 L6-20R)
- L6-30P input plug-in connection
- 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 <u>2POSTRMKITHD</u> supports 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
- \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only)

# **Specifications**

OUTPUT	
Output Volt Amp Capacity (VA)	5000
Output kVA Capacity (kVA)	5



Output Watt Capacity (Watts)	3500
Output kW Capacity (kW)	3.5
Output Capacity Details	Supports up to 102% load continuously in double conversion mode, 102 to 125% for 1 minute, 126% to 150% for 30 seconds; Loads over 150% trigger immediate bypass mode operation to support loads directly from mains power; Double conversion mode is automatically restored as the overload is cleared
Power Factor	0.7
Crest Factor	3:1
Nominal Output Voltage(s) Supported	200V; 208V; 220V; 240V
Nominal Voltage Details	Voltage selection via front panel LCD interface
Frequency Compatibility	50 / 60 Hz
Frequency Compatibility Details	Output frequency matches input nominal on startup
Output Voltage Regulation (Line Mode)	+/- 2%
Output Voltage Regulation (Economy Line Mode)	+/- 10%
Output Voltage Regulation (Battery Mode)	+/- 2%
Output Receptacles	(2) L6-20R; (2) L6-30R
Output Circuit Breakers	20A double-pole breaker protects L6-20R outlets, L6-30R outlets are unbreakered
Output AC Waveform (AC Mode)	Pure Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
INPUT	
Rated input current (Maximum Load)	24A (208V), 21A (240V)
Nominal Input Voltage(s) Supported	200V AC; 208V AC; 220V AC; 230V AC; 240V AC
UPS Input Connection Type	L6-30P
UPS Input Cord Length (ft.)	10
UPS Input Cord Length (m)	3.0
Recommended Electrical Service	30A 208/240V
Input Phase	Single-Phase
BATTERY	
Full Load Runtime (min.)	8 min. (3500w)
Half Load Runtime (min.)	20 min. (1750w)
Expandable Battery Runtime	Supports extended runtime with optional external battery packs
External Battery Pack Compatibility	BP240V10RT3U; BP240V557C-1PH; BP240V787C-1PH; BP240V1037C-1PH; BP240V1407C-1PH



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DC System Voltage (VDC)	240	
Battery Recharge Rate (Included Batteries)	Less than 6 hours from 10% to 80% (typical, full load discharge)	
Battery Replacement Description	Hot-swappable, user replaceable batteries	
Expandable Runtime	Yes	
VOLTAGE REGULATION		
Voltage Regulation Description	Online, double-conversion power conditioning	
Overvoltage Correction	2% output voltage regulation during overvoltages to 276	
Undervoltage Correction	2% output voltage regulation during undervoltages to 156	
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 (see manual)	
Switches	2 Switches control off/on power status and alarm-cancel/self-test operation; 2 additional switches support set and execute scrolling LCD functions	
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 Response Time	Instantaneous	
EMI / RFI AC Noise Suppression	Yes	
PHYSICAL		
Included Mounting Accessory Description	2 sets of adjustable 4 post rack rails included	
Installation Form Factors Supported with Optional Accessories	2 post rackmount ( <u>2POSTRMKITHD</u> ); Tower ( <u>2-9USTAND</u> )	
Optional Mounting Accessory Notes	2 sets of <u>2POSTRMKITWM</u> required for 2 post rackmount installation of separate power module and battery pack	
Primary Form Factor	Rackmount	
UPS Power Module Dimensions (hwd, in.)	5.2 x 17.5 x 26	
UPS Power Module Dimensions (hwd, cm)	13.21 x 44.45 x 66.04	
Rack Height (U Spaces)	5	
Maximum Device Depth (in.)	26	
Minimum Required Rack Depth (inches)	33	



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Maximum Device Depth (cm)	66.04
Minimum Required Rack Depth (cm)	83.82
UPS Power Module Weight (lbs.)	42
UPS Power Module Weight (kg)	19.05
UPS Dimensions Details	Includes 3U UPS/power module and 2U battery pack
Included Battery Pack Dimensions (hwd / in.)	3.5 x 17.5 x 22.5
Included Battery Pack Weight (lbs.)	92
Included Battery Pack Weight (kg)	41.73
UPS Shipping Dimensions (hwd / in.)	25 x 40 x 48
UPS Shipping Dimensions (hwd / cm)	63.50 x 101.60 x 121.92
Shipping Weight (lbs.)	196
Shipping Weight (kg)	89
Cooling Method	Fan
UPS Housing Material	Steel
Maximum Device Depth (mm)	660
Minimum Required Rack Depth (mm)	838
Primary UPS Height (mm)	132
Primary UPS Width (mm)	444
Primary UPS Depth (mm)	660
Shipping Height (mm)	635
Shipping Width (mm)	1016
Shipping Depth (mm)	1219
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)	1327
Battery Mode BTU / Hr. (Full Load)	1327
AC Mode Efficiency Rating (100% Load)	90%
AC Economy Mode Efficiency Rating (100% Load)	94%



COMMUNICATIONS		
Communications Interface	DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface	
Network Management Cards	SNMPWEBCARD; TLNETCARD; WEBCARDLX; MODBUSCARD; RELAYIOCARD	
Network Monitoring Port Description	RS232 and contact closure communications are located on two separate DB9 ports	
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	DB9 cable included	
LINE / BATTERY TRANSFER		
Transfer Time	No transfer time (0 ms.) in online, double-conversion mode	
Low Voltage Transfer to Battery Power (Setpoint)	156	
High Voltage Transfer to Battery Power (Setpoint)	276	
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	
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); CE; Tested to GOST (Russia); Tested to SASO (Saudi Arabia); 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 <u>Ultimate Lifetime Insurance</u>	

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