



# SmartOnline 12kVA On-Line Double-Conversion UPS, N+1, 8U Rack/Tower, 200-240V Hardwire output

### MODEL NUMBER: SU12KRT4UHW







#### Description

Tripp Lite SU12KRT4UHW 12,000VA / 12Kva / 10,800 watt online, double-conversion UPS system offers complete power protection for critical server, network and telecommunications equipment in an 8U rack/tower configuration. This system delivers complete N+1 redundancy when used at loads up to 6kVA, and non-redundant operation at loads between 6 and 12kVA. Fault-tolerant auto-bypass prevents unexpected service interruptions during UPS overload or internal fault conditions. Included parallel PDU with manual bypass switching enables hot-swappable replacement of all major UPS system components in both N+1 and combined operating modes. Enhanced availability, fault tolerance and simple hot-swap replacement options make this UPS ideal for advanced networking applications in data centers, computer rooms, network closets and rugged industrial locations.

#### **Highlights**

- 12kVA / 12,000VA / 10,800 watt on-line double-conversion 8U rack/tower UPS
- 200/208/220/230/240V +/-2%
  50/60Hz output, Economy mode option
- Hot-swap power & battery modules, N+1 fault tolerance at loads up to 6kVA
- USB, RS232, EPO ports, Slot for optional SNMP/WEB & other card options
- Front panel LEDs, Detailed LCD monitoring and control screen
- Expandable runtime with optional external battery packs

#### Package Includes

- 2 SU6000RT4UHVPM UPS
  Power Modules
- SUPDMB12KHW Detachable
  PDU with manual bypass switch
- 4 post compatible rack rail kit (2 sets)
- PowerAlert software and complete data cabling

#### **Features**

- Tripp Lite SU12KRT4UHW 12kVA, 12,000VA / 10,800 watt on-line, double-conversion UPS system in 8U total rack/tower configuration
- Unique configuration offers 12kVA non-redundant operation and automatic N+1 redundancy at load levels of 6kVA and under
- Included Parallel PDU with manual bypass switch enables hot-swap replacement of power modules at any supported load level
- Hardwire input and output connections
- Maintains sine wave output within 2% of selectable 200/208/220/230/240V nominal
- Supports 50/60Hz operation for worldwide frequency compatibility
- Expandable runtime with optional external battery packs
- Some external battery configurations require the use of Tripp Lite's External Battery Configuration Software (see manual)
- Battery independent restart
- · Highly efficient economy mode option
- Optional SNMPWEBCARD; RELAYIOCARD and RELAYIOMINI interface modules available (RELAYIOMINI requires removal of USB interface module)
- Applications utilizing the optional network communications card require two SNMPWEBCARD accessories (install one per included power module)
- HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X
- Includes Free PowerAlert monitoring software; PowerAlert LOCAL, PowerAlert NSA and PowerAlert NMS for monitoring up to 250 SNMP-enabled UPS,



PDU and other networking devices

- Optional 2POSTRMKITHD supports installation in 2 post 19 inch racks (2 required)
- Optional 2-9USTAND supports upright tower placement (1 required)
- Supports Emergency Power Off (EPO) via built-in interface
- Front panel LEDs and LCD readout with scroll controls
- LED / LCD display panel rotates for viewing in rackmount or tower configurations
- External battery packs are field replaceable and hot swappable
- Frequency conversion mode enables conversion of 60Hz to 50Hz or 50Hz to 60Hz (no de-rating)
- \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only)

## **Specifications**

General Info		
Product Group	UPS SYSTEMS	
ОИТРИТ		
Output Volt Amp Capacity (VA)	12000	
Output kVA Capacity (kVA)	12	
Output Watt Capacity (Watts)	10800	
Output kW Capacity (kW)	10.8	
Power Factor	0.9	
Crest Factor	3:1	
Nominal Output Voltage(s) Supported	200V; 208V; 220V; 230V; 240V	
Frequency Compatibility	50 / 60 Hz	
Frequency Compatibility Details	Output frequency matches input nominal on startup; Frequency conversion mode enables conversion of 60Hz to 50Hz or 50Hz to 60Hz (no de-rating)	
Output Voltage Regulation (Line Mode)	+/- 2%	
Output Voltage Regulation (Economy Line Mode)	+/- 10%	
Output Voltage Regulation (Battery Mode)	+/- 2%	
UPS Output Receptacles	Hardwire	
Output AC Waveform (AC Mode)	Pure Sine wave	
Output AC Waveform (Battery Mode)	Pure Sine wave	
INPUT		
Rated input current (Maximum Load)	63.8A (200V), 61.2A (208V), 58A (220V), 55.4A (230V), 53.2A (240V)	
Nominal Input Voltage(s) Supported	200V AC; 208V AC; 220V AC; 230V AC; 240V AC	





UPS Input Connection Type	Hardwire	
Recommended Electrical Service	70A	
BATTERY		
Full Load Runtime (min.)	2 minutes (10,800 watts)	
Half Load Runtime (min.)	8.5 minutes (5400 watts)	
Expandable Battery Runtime	Runtime is expandable with external battery packs	
External Battery Pack Compatibility	BP192V12-3U; BP192V557C-1PH; BP192V787C-1PH; BP192V1037C-1PH; BP192V1407C-1PH	
Expandable Runtime Description	For best results, add external batteries in multiples of two so that both included 6kVA power modules have an equal number and type of connected battery packs	
DC System Voltage (VDC)	192	
Battery Recharge Rate (Included Batteries)	6 hours from 10% to 90% (typical, full load discharge)	
Internal UPS Replacement Battery Cartridge	RBC5-192	
Battery Access	Front panel battery access door	
Battery Replacement Description	Hot-swappable, user replaceable internal batteries	
VOLTAGE REGULATION		
Voltage Regulation Description	Online, double-conversion power conditioning	
Overvoltage Correction	Corrects overvoltages as high as 300V (<90% load) and 280V (full load)	
Undervoltage Correction	Corrects undervoltages as low as 100 (<50% load) and 155V (full load); derates linearly	
LEDS ALARMS & SWITCHES		
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	
Audible Alarm	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	
SURGE / NOISE SUPPRESSION		
UPS AC Suppression Response Time	Instantaneous	
EMI / RFI AC Noise Suppression	Yes	
PHYSICAL		
Installation Form Factors Supported	2 post rackmount (2POSTRMKITHD); Tower (2-9USTAND)	



Optional Mounting Accessory Notes	Qty 2 2POSTRMKITHD required for SU12KRT3UHW
Primary Form Factor	Rackmount
UPS Power Module Dimensions (hwd, in.)	6.85 x 17.5 x 20.7
UPS Power Module Dimensions (hwd, cm)	17.4 x 44.5 x 52.6
Installed Whole System Maximum Rack Depth (in.)	24
Installed Whole System Maximum Rack Depth (cm)	61
Rack Height	8U
Secondary Form Factor	Tower
UPS Power Module Weight (lbs.)	108
UPS Power Module Weight (kg)	49
UPS Dimensions Details	Unit weight and dimensions are for one of the two included SU6000RT4UHVPM UPS Power Modules
UPS Shipping Dimensions (hwd / in.)	41 x 24 x 34
UPS Shipping Dimensions (hwd / cm)	104 x 61 x 97
Shipping Weight (lbs.)	342
Shipping Weight (kg)	155.3
Cooling Method	Fans
UPS Housing Material	Steel
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)	3534
AC Economy Mode BTU / Hr. (Full Load)	1414
Battery Mode BTU / Hr. (Full Load)	3568
AC Economy Mode Efficiency Rating (100% Load)	96%
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; EPO (emergency power off); Slot for SNMP/Web interface
	4/5





Network Monitoring Port Description	Applications utilizing the optional network communications card require two SNMPWEBCARD accessories (install one per included power module);Additional contact closure support with optional RELAYIOCARD and RELAYIOMINI interface cards; RELAYIOMINI installation requires removal of panel containing USB ports	
PowerAlert Software	Included	
Communications Cable	USB, DB9 serial and EPO cables included	
WatchDog Compatibility	Yes	
LINE / BATTERY TRANSFER		
Transfer Time	No transfer time (0 ms.) in online, double-conversion mode	
Low Voltage Transfer to Battery Power (Setpoint)	156V (full load) / 100V (50% load or less, derates linearly)	
High Voltage Transfer to Battery Power (Setpoint)	280V (full load) / 300V (90% load or less)	
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 Energy-Saving Features	High efficiency economy mode operation; Support for daily startup and shutoff; Schedulable daily hours of economy mode operation	
CERTIFICATIONS		
UPS Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Meets FCC Part 15 Category A (EMI); ROHS (Restriction of Hazardous Substances)	
UPS Certification Details	IEC 61000-4-5 1995 B Surge Immunity	
WARRANTY		
Product Warranty Period (Worldwide)	2-year limited warranty	

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