SmartOnline 200-240V 10kVA 9kW Double-Conversion UPS, 6U, Extended Run, Network Card Slot, USB, DB9, Switch, Hardwire

MODEL NUMBER: **SU10KRT3UHV**

Highlights

- 10kVA/10,000VA/9000W on-line double-conversion UPS; 0.9 power factor
- 200/208/220/230/240V 50/60Hz output; Economy mode option
- 6U Rack / Tower compatible; Hot-swappable power and battery modules
- Add optional WEBCARDLX with latest version of PADM20 for enhanced remote management
- Front panel LEDs with detailed LCD monitoring and control screen
- Expandable runtime with optional external battery packs
- Hardwire input (3 wire); Hardwire output (3 wire)

Package Includes

- SU10000RT3UPM 3U UPS power module
- BP240V10RT3U external battery pack
- SUPDMB710HW Detachable PDU with manual bypass switch
- Four post compatible rack rail kit (2 sets)
- Tower stands for upright tower configuration
- USB, DB9 and EPO cabling
- User manual

Description

Tripp Lite SU10KRT3UHV 10,000VA / 10kVA / 9000 watt online, double-conversion UPS system offers complete power protection for critical network applications. This system delivers online, double-conversion UPS protection with zero transfer time, suitable for advanced networking applications. Fault-tolerant auto-bypass prevents unexpected service interruptions during UPS overload or internal fault conditions. Included detachable PDU with manual bypass switch enables hot-swappable replacement of entire UPS power module with no interruption to connected equipment. 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.

Features

- Tripp Lite SU10KRT3UHV 10kVA/10,000VA/9000 watt on-line, double-conversion UPS system in 6U total rack/tower configuration (3U UPS power module and 3U external battery pack)
- Detachable PDU with manual bypass switch enables hot-swappable UPS power module replacement with no interruption in output power to connected networking equipment
- Fault tolerant electronic bypass maintains utility output during a variety of UPS fault conditions
- Hardwire input (3 wire) and hardwire output (3 wire) connections
- Supports North American (L1,L2,G) 208/240v hardwire input / output, plus International 230/220/240v (L,N,PE) hardwire input / output
- Optional SU6000XFMR2U transformer offers 120v output in North American 208/240V (L1,L2,G) input configurations
- Maximum installed rack depth of only 32.5 in. / 82.6cm
- Full-time active power conditioning provides clean, continuous dual-conversion AC output free of

voltage fluctuations, power interruptions and line noise

- Double-conversion operation converts raw input from AC to DC, then resynthesizes output power back to perfect sine wave AC with enhanced protection from harmonic distortion, fast electrical impulses and other hard-to-solve power problems not addressed by other UPS types

- Maintains full-time sine wave output within 2% of selectable 200/208/220/230/240V nominal during brownouts as low 100V and overvoltages as high as 300V

- Supports 50/60Hz operation for worldwide frequency compatibility

- Expandable runtime is supported with optional BP240V10RT3U; BP240V787C-1PH external battery packs

- Some external battery configurations require the use of Tripp Lite's External Battery Configuration Software (see manual)

- Intelligent battery management system with temperature-compensated charging extends battery life

- Highly efficient operation in optional economy mode significantly reduces BTU heat output and operating energy costs

- Battery independent restart ensures automatic UPS power-up without user interaction after lengthy power outages, even when batteries are expired and require replacement

- 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

- HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X

- Compatible with Tripp Lite UPS management card options TLNETCARD, WEBCARDLX, SNMPWEBCARD, MODBUSCARD and RELAYIOCARD

- Optional WEBCARDLX (sold separately) with the latest version of PowerAlert Device Manager firmware (PADM20) provides enhanced remote management capabilities

- PADM20 and PowerAlert Element Manager (PAEM) form a powerful tool for expanding maintenance functions in large installations, including firmware update checks and backup and restoration of device configurations

- Optional RELAYIOMINI interface module offers three configurable hard contact closure outputs for custom event notification (requires removal of USB interface module)

- Supports Emergency Power Off (EPO) via built-in interface

- Included rail kit supports 6U 19 inch rackmount installation in 4 post racks

- Optional 2POSTRMKITHD supports installation in 2 post 19 inch racks

- Front panel LEDs and LCD readout with scroll controls and password option supports visual monitoring of all major UPS functions and advanced UPS settings for charge level, nominal voltage selection, frequency conversion and other operational parameters

- LED / LCD display panel rotates for viewing in rackmount or tower configurations

- Network-grade AC surge and noise suppression

- Industrial mode option (factory preset) enables supports high current startup loads by momentarily switching to bypass mode in response to short duration overload conditions

- Frequency conversion mode enables conversion of 60Hz to 50Hz or 50Hz to 60Hz (no de-rating)

- External battery packs are field replaceable and hot swappable

Specifications

OVERVIEW	
UPC Code	037332115935
UPS Type	On-Line

INPUT	
Rated input current (Maximum Load)	56.1A (200V), 54A (208V), 51A (220V), 48.8A (230V), 46.8A (240V)
Nominal Input Voltage(s) Supported	200V AC; 208V AC; 220V AC; 230V AC; 240V AC
UPS Input Connection Type	Hardwire
UPS Input Connection Description	Supports North American 208/240V input (L1,L2,G) and International 230/220/240V (L,N,PE) input wiring
Recommended Electrical Service	60A
Input Phase	Single-Phase

OUTPUT	
Output Volt Amp Capacity (VA)	10000
Output kVA Capacity (kVA)	10
Output Watt Capacity (Watts)	9000
Output kW Capacity (kW)	9
Output Capacity Details	Supports up to 105% load continuously in double conversion mode, 106 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 load levels are reduced to 95% or less
Power Factor	0,9
Crest Factor	3:1
Nominal Voltage Details	Voltage selection via front panel LCD interface
Frequency Compatibility	50 / 60 Hz; Supports 50 to 60 Hz and 60 to 50 Hz conversion
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 frequency regulation +/- 0.05Hz (free running)
Output Voltage Regulation (Line Mode)	+/- 2%
Output Voltage Regulation (Economy Line Mode)	+/- 10%
Output Voltage Regulation (Battery Mode)	+/- 2%
Output Receptacle Details	Supports North American 208/240V* output (L1,L2,G) and International 230/220/240V (L,N,PE) hardwire output; *For 120V output with 208/240V (L1,L2,G) input wiring, use optional SU6000XFMR2U transformer

Output AC Waveform (AC Mode)	Pure Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
Nominal Output Voltage(s) Supported	200V; 208V; 220V; 230V; 240V
Output Receptacles	Hardwire
Individually Controllable Load Banks	No

BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
Full Load Runtime (min.)	4.3 min. (9000w)
Half Load Runtime (min.)	12.5 min. (4500w)
Expandable Battery Runtime	Supports extended runtime with optional external battery packs
Expandable Runtime	Yes
External Battery Pack Compatibility	BP240V10RT3U ; BP240V787C-1PH
DC System Voltage (VDC)	240
Battery Recharge Rate (Included Batteries)	Less than 6 hours from 10% to 90% (typical, full load discharge)
Battery Replacement Description	Hot-swappable, user replaceable external battery packs

VOLTAGE REGULATION	
Voltage Regulation Description	2% output voltage regulation in standard online, double-conversion mode
Overvoltage Correction	Corrects overvoltages up to 300V
Undervoltage Correction	Corrects undervoltages as low as 100V

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; LCD Display supports ENGLISH, FRENCH, GERMAN, ITALIAN, SPANISH and PORTUGUESE (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; bundled PDU includes bypass switch to enable hot-swap UPS power module replacement
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	2565

UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
PHYSICAL	
Cooling Method	Fan
Included Battery Pack Dimensions (hwd / in.)	5.25 x 17.5 x 25
Included Battery Pack Weight (lbs.)	158.7
Included Battery Pack Weight (kg)	71.99
Included Mounting Accessory Description	2 sets of adjustable 4 post rack rails included; 2-9USTAND tower kit included
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount
Installation Form Factors Supported with Optional Accessories	2 post rackmount (2POSTRMKITHD)
Maximum Device Depth (cm)	82.55
Maximum Device Depth (in.)	32.5
Maximum Device Depth (mm)	826
Minimum Required Rack Depth (cm)	96.52
Minimum Required Rack Depth (inches)	38
Optional Mounting Accessory Notes	2 sets of 2POSTRMKITHD required for 2 post rackmount installation of all included components
Primary Form Factor	Rackmount
Primary UPS Depth (mm)	656
Primary UPS Height (mm)	131
Primary UPS Width (mm)	445
Rack Height	6U
Shipping Dimensions (hwd / cm)	78.74 x 66.04 x 104.14
Shipping Dimensions (hwd / in.)	31.00 x 26.00 x 41.00
Shipping Weight (kg)	148.58
Shipping Weight (lbs.)	327.56
Unit Dimension Details	Includes 3U UPS/power module, 3U external battery pack plus SUPDMB710HW PDU with bypass; MAXIMUM DEVICE DEPTH specification refers to the whole UPS installed depth with bypass PDU installed
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	13.06 x 44.45 x 65.58
UPS Power Module Dimensions (hwd, in.)	5.14 x 17.5 x 25.82

UPS Power Module Weight (kg)	19.50
UPS Power Module Weight (lbs.)	43
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)	3415
AC Economy Mode BTU / Hr. (Full Load)	1280
Battery Mode BTU / Hr. (Full Load)	4593
AC Mode Efficiency Rating (100% Load)	91%
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	
Network Management Cards	SNMPWEBCARD ; TLNETCARD ; WEBCARDLX ; MODBUSCARD ; RELAYIOCARD
Network Monitoring Port Description	Additional contact closure support with optional RELAYIOCARD and RELAYIOMINI interface cards. RELAYIOMINI installation requires removal of panel containing USB ports
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert Local software at https://www.tripplite.com/poweralert
Communications Cable	USB, DB9 serial and EPO cables included
WatchDog Compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications
Communications Interface	DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface; USB (HID enabled)
LINE / BATTERY TRANSFER	
Transfer Time	No transfer time (0 ms.) in online, double-conversion mode
Transfer Time (Economy Mode)	8 ms. typical power failure response in optional economy mode
Low Voltage Transfer to Battery Power (Setpoint)	100V
High Voltage Transfer to Battery Power (Setpoint)	300V

SPECIAL FEATURES	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
Economy Mode Operation	Optional economy mode enables high efficiency bypass operation with a maximum output voltage variation of +/-10%. Double conversion mode is automatically restored as mains voltage varies beyond +/-10% with less than 1 millisecond transfer time between modes.
High Availability UPS Features	Auto Probe Monitoring (requires WEBCARDLX); Automatic inverter bypass; Expandable battery backup; Hot swappable UPS power module; Hot swappable batteries; 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
STANDARDS & COMPLIANCE	
UPS Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Tested to NOM (Mexico); CE; Meets FCC Part 15 Category A (EMI)
Certification Details	IEC 61000-4-5 1995 B Surge Immunity
WARRANTY	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	$250,000 Ultimate Lifetime Insurance