

SmartOnline 200-240V 12kVA 10.8kW Double-Conversion UPS, N+1, 8U, Extended Run, Network Card Slot, USB, DB9, Bypass, Hardwire

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.

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)
- Intelligent battery management system with temperature-compensated charging extends battery life
- Battery independent restart ensures automatic UPS power-up after lengthy power outages, even with expired batteries
- Compatible with Tripp Lite UPS management card options TLNETCARD, WEBCARDLX, SNMPWEBCARD, MODBUSCARD and RELAYIOCARD
- Optional WEBCARDLX with the latest version of PowerAlert Device Manager firmware (PADM20) provides enhanced remote management capabilities

Highlights

- 12kVA / 12,000VA / 10,800 watt on-line double-conversion 8U rack/tower UPS
- 200/208/220/230/240V +/-2% 50/60Hz output
- Hot-swap power and battery modules, N+1 fault tolerance at loads up to 6kVA
- Add optional WEBCARDLX with latest version of PADM20 for enhanced remote management
- 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)
- USB, DB9 and EPO cables



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- 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 modules available (requires removal of USB interface module)
- Applications utilizing the optional network communications card require two compatible card 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
- USB & Serial ports enable data-saving unattended shutdown when used with Tripp Lite's PowerAlert software, available via FREE download from tripplite.eaton.com/products/power-alert
- 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

| OVERVIEW | |
|------------------------------------|--|
| UPC Code | 037332157119 |
| UPS Type | On-Line |
| INPUT | |
| Input Phase | Single-Phase |
| 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 |
| 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 | 70A |
| OUTPUT | |
| Output Capacity (VA) | 12000 |
| Output Capacity (kVA) | 12 |
| Output Capacity (Watts) | 10800 |
| Output Capacity (kW) | 10.8 |
| 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 |



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| 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 Voltage Regulation (Line Mode) | +/- 2% |
| 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) |
| Runtime Full Load (min.) | 2 min. (10800W) |
| Runtime Half Load (min.) | 8.5 min. (5400W) |
| Expandable Runtime | Yes |
| 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 |
| External Battery Pack Compatibility | BP192V12-3U BP192V787C-1PH |
| DC System Voltage (VDC) | 192 |
| Battery Recharge Rate (Included Batteries) | Less than 6 hours from 10% to 90% (typical, full load discharge) |
| Battery Access | Front panel battery access door |
| Internal UPS Replacement Battery Cartridge | Each of the two included 6kVA power modules contain one RBC5-192 internal replacement battery cartridge |
| Battery Replacement Description | Hot-swappable, user replaceable internal battery cartridges and external battery packs |
| VOLTAGE REGULATION | |
| Voltage Regulation Description | +/-2% output voltage regulation in standard online, double-conversion mode |
| 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 |
| 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) |



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| 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 |
| 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, 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 | 2595 |
| UPS AC Suppression Response Time | Instantaneous |
| EMI / RFI AC Noise Suppression | Yes |
| PHYSICAL | |
| Primary Form Factor | Rackmount |
| Rack Height | 8U |
| Cooling Method | Fans |
| Included Mounting Accessory Description | Includes 4 post mounting accessories for each included component |
| Installation Form Factors Supported with Included Accessories | 4 post 19 inch rackmount |
| Installation Form Factors Supported with Optional Accessories | 2 post rackmount (2-Post-Rack-Mount-Installation-Kit-3U-Larger-UPS-Transformer-Battery-Pack-Components~2POSTRMKITHD); Tower (2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND) |
| Maximum Device Depth (cm) | 60.96 |
| Maximum Device Depth (in.) | 24 |
| Maximum Device Depth (mm) | 610 |
| Minimum Required Rack Depth (cm) | 89.41 |
| Minimum Required Rack Depth (inches) | 35.2 |
| Optional Mounting Accessory Notes | Qty 2 2-Post-Rack-Mount-Installation-Kit-3U-Larger-UPS-Transformer-Battery-Pack-Components~2POSTRMKITHD ; required for 2 post rackmount installation of all included components |
| Primary UPS Depth (mm) | 526 |
| Primary UPS Height (mm) | 174 |
| Primary UPS Width (mm) | 445 |
| Shipping Dimensions (hwd / in.) | 41.00 x 24.00 x 34.00 |
| Shipping Dimensions (hwd / cm) | 104.14 x 60.96 x 86.36 |
| Shipping Weight (lbs.) | 342.00 |
| Shipping Weight (kg) | 155.13 |



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| Unit Dimension Details | Includes two 4U UPS/power modules plus SUPDMB12HW detachable parallel bypass PDU; UPS Power Module Dimensions are for one of the two included UPS/power modules; 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) | 17.40 x 44.45 x 52.58 |
| UPS Power Module Dimensions (hwd, in.) | 6.85 x 17.5 x 20.7 |
| UPS Power Module Weight (kg) | 48.99 |
| UPS Power Module Weight (lbs.) | 108 |
| 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 Mode Efficiency Rating (100% Load) | 90% |
| Battery Mode Heat Dissipation (BTU/Hr) @ Full Load | 4558 |
| Operating Elevation | up to 6500 ft. |
| Audible Noise | 60 dBA at front side 1 meter |
| COMMUNICATIONS | |
| Network Management Cards | SNMPWEBCARD; TLNETCARD ; WEBCARDLX; MODBUSCARD ; RELAYIOCARD |
| Network Monitoring Port Description | Applications utilizing any supported network management card option, require the use of two network cards of the same-model (install one card per included UPS power module); RELAYIOMINI installation requires removal of panel containing USB ports on each included UPS power module |
| PowerAlert Software | For local monitoring via the UPS's built-in communication ports, download PowerAlert software at https://tripplite.eaton.com/products/power-alert |
| Communications Cable | USB, DB9 serial and EPO cables included |
| WatchDog Compatibility | Yes |
| Network Management Card Description | Network management card optional |
| 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 |
| 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) |



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| FEATURES & SPECIFICATIONS | |
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| Cold Start (Startup in Battery Mode During a Power Failure) | Cold-start operation supported |
| 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; N+1 Redundant up to 50% capacity; On-Line/Double-Conversion; Remote management; Sine wave output; Surge/noise protection; Zero transfer time |
| Green Energy-Saving Features | Support for daily startup and shutoff |
| APPLICATIONS | |
| UPS Applications | Mission Critical Applications |
| STANDARDS & COMPLIANCE | |
| Product Certifications | IEC 61000; CSA (Canada); UL 1778 |
| Product Compliance | RoHS; FCC Part 15 Class A (USA) |
| WARRANTY & SUPPORT | |
| Product Warranty Period (Worldwide) | 2-year limited warranty |

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