

# 200–240V 5000VA 5000W On-Line Double-Conversion UPS, Unity Power Factor, Hardwire Input/Output, 3U

MODEL NUMBER: SU5KRT3UHW



On-line double-conversion UPS provides pure sine wave AC output to server and network equipment in data centers and computer rooms.

## Features

### Protects Mission-Critical Rack-Mounted Equipment against Damage, Downtime and Data Loss

SmartOnline® SU5KRT3UHW Unity Power Factor UPS system protects connected equipment against damage, downtime and data loss due to power outages, voltage fluctuations and transient surges. Unity Power Factor design enables full 5000VA / 5000W output capacity. In double-conversion mode, this UPS system maintains perfect output by continuously converting AC input to DC, then re-converting UPS output to fully regulated sine wave AC with  $\pm 1\%$  voltage regulation and zero transfer time between online and battery modes. Featuring true on-line, double-conversion operation, SU5KRT3UHW provides the highest level of UPS power protection for critical server, network and telecom equipment.

**Reliable, Expandable Battery Backup** UPS battery backup keeps connected equipment operational through short power failures, and provides time to save data and perform an orderly system shutdown in case of a prolonged blackout. The internal battery set provides 14 minutes of support at half load and 5 minutes at full load. During normal operation, incoming utility power keeps the battery fully charged so backup power will be available when needed. Advanced temperature-controlled battery charge management system provides efficient recharge and enhanced battery lifespan. For mission-critical applications demanding continuous uptime, the 5kVA UPS can provide expandable runtime with optional BP192V12RT3US external battery pack (sold separately). Battery-independent restart ensures automatic UPS power-up after lengthy power outages, even with expired batteries.

**Economy Mode Helps the Environment and Your Cash Flow** Operates with >98% full-load efficiency in optional economy mode significantly reducing BTU heat output and operating energy costs.

**Intuitive Front-Panel Interface offers Convenient Monitoring** Front-panel LEDs indicate line power, AC output, On-battery mode, and Fault conditions. The LCD readout with scroll controls supports visual monitoring of a variety of control options to support advanced UPS settings and configurations. The panel rotates for comfortable viewing in rack-mount or tower configuration.

**Pre-installed WEBCARDLXMINI Network Interface Offers 24/7 Access** Pre-installed Java-free HTML5-based WEBCARDLXMINI interface enables full remote access for site power and UPS status monitoring, configuration, control and email notifications via secure web browser, SNMP, telnet or SSH. It supports 10/100 Mbps auto-sensing for optimum communication with an Ethernet network. Automated alerts help prevent accidental overloads, power loss and downtime. Advanced Communications Ports USB and DB9

## Highlights

- Unity (1.0) power factor equalizes VA and wattage to safely support more equipment
- Zero transfer time between on-line and battery modes for uninterrupted operation
- Optional external battery packs provide additional runtime for applications requiring it
- Pre-installed WEBCARDLXMINI network interface supports Auto Probe feature
- ENERGY STAR-certified to save electricity, lower costs and protect the environment

## Applications

- Delivering perfectly regulated sine wave output to mission-critical equipment
- Protecting connected components from dangerous surges, spikes and line noise
- Keeping equipment operational through short power failures
- Allowing time to save data and safely shut down components in case of a prolonged blackout

## Package Includes

- SU5KRT3UHW on-line double-conversion UPS
- Pre-installed WEBCARDLXMINI network management card
- (2) Hardwire strain reliefs
- USB cable
- RS-232 cable
- Rack-mounting hardware
- Owner's manual



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ports with included cabling enable data-saving unattended shutdown of connected systems when used with free downloadable PowerAlert® software. Capabilities include detailed monitoring of load levels, self-test data and utility power conditions. DB9 ports also support basic contact-closure monitoring to report On-battery and Low-battery status for legacy systems.

**Versatile Installation Options**Hardware is included for mounting the complete 5kVA UPS system with internal batteries in 3U of space in an EIA-standard 19-inch 4-post rack. Use the optional 2POSTRMKITHD for 2-post rack mounting or the optional 2-9USTAND for mounting in an upright tower position.

**2-Year Warranty, \$250K Ultimate Lifetime Insurance and Environmentally Responsible Design**The SU5KRT3UHW comes with a 2-year warranty and \$250,000 of Ultimate Lifetime Insurance for any connected components damaged by a power surge (U.S., Canada and Puerto Rico only). It's manufactured in compliance with strict RoHS specifications, reflecting commitment to environmental responsibility.

## Specifications

OVERVIEW	
UPC Code	037332237941
UPS Type	On-Line
INPUT	
Input Phase	Single-Phase
Rated input current (Maximum Load)	Hardwire AC input: 27A (200V), 25.6A (208V), 24.2A (220V), 21.7A (230V), 22.2A (240V) maximum; Max inrush current: 100A
Nominal Input Voltage(s) Supported	200V AC; 208V AC; 220V AC; 230V AC; 240V AC
Nominal Input Voltage Description	208V factory default
UPS Input Connection Type	Hardwire
UPS Input Connection Description	Hardwire input supports 3 wire L1, L2/N, PE(GND) input configurations
Input Frequency	50 / 60 Hz
Power Factor (Input)	0.98 minimum (full load, nominal input voltage)
THDi	<8% full load; <10% half load
OUTPUT	
Output Capacity (VA)	5000
Output Capacity (kVA)	5
Output Capacity (Watts)	5000
Output Capacity (kW)	5
Output Capacity Details	Inverter supports up to 104% load continuously, Up to 125% / 150% for 1.0 / 0.5 min. before bypass transfer (when available) or shutdown; Loads greater than 150% trigger immediate shutdown; AC TRANSIENT RESPONSE: ±1.5% RMS of initial value (between 10% & 90% load step)
Power Factor	1.0
Crest Factor	3:1 maximum

Nominal Voltage Details	Nominal output voltage selection is available via front panel LCD interface
Frequency Compatibility	50 / 60 Hz
Frequency Compatibility Details	MAX-QUALITY/MAX-EFFICIENCY/AUTO-ADAPTIVE MODES: Output frequency matches input nominal on startup and tracks input frequency up to $\pm 3$ Hz of nominal; When input frequency is greater than $\pm 3$ Hz of nominal, output frequency is inverter regulated to $\pm 0.5$ Hz of nominal; BATTERY MODE: Output frequency is inverter regulated to $\pm 0.5$ Hz of the configured nominal output frequency; FREQUENCY CONVERSION MODE: Output is inverter regulated to the selected 50/60Hz output setting with $\pm 0.5$ Hz regulation (de-rates to 70% capacity, bypass not available); FREQUENCY REGULATION MODE: Enables frequency correction to $\pm 0.5$ Hz of the frequency sensed by the UPS on startup (no de-rating, bypass is available when input frequency is within $\pm 0.5$ Hz of output)
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
Output Voltage Regulation	$\pm 1\%$ Inverter output; $\pm 10\%$ Economy mode; $\pm 15\%$ Bypass mode (configurable from $\pm 5\%$ to $\pm 20\%$ ); Output voltage THD $< 2\%$ (full load) / $< 3\%$ (half load)
Individually Controllable Load Banks	No
<b>BATTERY</b>	
Battery Type	Valve Regulated Lead Acid (VRLA)
Runtime Full Load (min.)	5 min. (5000W)
Runtime Half Load (min.)	14 min. (2500W)
Expandable Runtime	Yes
Expandable Runtime Description	Up to 4 external battery packs with sensor cabling are automatically sensed and configured for advanced temperature controlled charging and accurate runtime reporting; Configurations using 5-10 external battery packs are supported, but may require the use of Tripp Lite's EXTERNAL BATTERY CONFIGURATION software for full integration
External Battery Pack Compatibility	<a href="http://triplite.eaton.com/External-Battery-Pack-192V-3U-Rack-Tower-BP192V12RT3US">BP192V12RT3US</a>
DC System Voltage (VDC)	192
Battery Recharge Rate (Included Batteries)	3 hours from 10% to 90% (typical, internal batteries with full load discharge); Charge settings: 1.5A (internal batteries) / 2A (with external battery packs) configures automatically; Supports temperature compensated battery charging
Battery Access	Front panel battery access door
Internal UPS Replacement Battery Cartridge	<a href="http://triplite.eaton.com/UPS-Replacement-192VDC-Battery-Cartridge-3U-RBC58-3US">RBC58-3US</a> (qty 1)
Battery Replacement Description	Hot-swappable, user replaceable internal batteries and external battery packs
<b>VOLTAGE REGULATION</b>	
Voltage Regulation Description	$\pm 1\%$ Inverter output regulation; $\pm 10\%$ in optional Eco mode
Overvoltage Correction	Corrects overvoltages as high as 275V
Undervoltage Correction	Corrects undervoltages as low as 156V (100% load) / 100V (50% load); derates linearly
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	

Front Panel LCD Display	Selectable LCD display with Escape, Page Up, Page Down, Enter and Power buttons enable UPS control and detailed monitoring options; LED/LCD panel rotates for viewing in rack/tower formats (see manual)
Switches	Includes main power off/on switch, plus Up, Down, Enter and Esc switches to set and execute 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	4 front-panel LEDs indicate AC input, AC output, Battery mode and Fault conditions
<b>SURGE / NOISE SUPPRESSION</b>	
UPS AC Suppression Joule Rating	1680
UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
<b>PHYSICAL</b>	
Primary Form Factor	Rackmount
Rack Height	3U
Cooling Method	Load and thermal controlled cooling fans; Field-replaceable (92mm x 38mm, ball-bearing, 115 CFM)
Included Mounting Accessory Description	Includes 4 post rackmount installation accessories; Included mounting brackets support front-to-rear rail distances of 520 to 914.4mm (20.5 to 36 in.); Enclosures require a minimum depth of 754 mm (29.7 in.) from the front rails to the closed rear door
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount
Installation Form Factors Supported with Optional Accessories	2 post rackmount ( <a href="http://tripplite.eaton.com/2-Post-Rack-Mount-Installation-Kit-3U-Larger-UPS-Transformer-Battery-Pack-Components~2POSTRMKITHD">2-Post-Rack-Mount-Installation-Kit-3U-Larger-UPS-Transformer-Battery-Pack-Components~2POSTRMKITHD</a> ); Tower ( <a href="http://tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND</a> )
Minimum Required Rack Depth (cm)	93.98
Minimum Required Rack Depth (inches)	37
Primary UPS Depth (mm)	762
Primary UPS Height (mm)	131
Primary UPS Width (mm)	445
Shipping Dimensions (hwd / in.)	6.89 x 23.70 x 33.35
Shipping Weight (kg)	72.26
Unit Dimension Details	Minimum required rack depth assumes 127mm / 5 in. additional depth for AC input/output cabling; See submittal drawing for additional dimension detail
UPS Housing Material	Sheet metal
UPS Power Module Dimensions (hwd, in.)	5.14 x 17.5 x 30
UPS Power Module Weight (kg)	52.34
UPS Power Module Weight (lbs.)	115.39
Unit Weight (lbs.)	115.390
Unit Weight (kg)	52.34

<b>ENVIRONMENTAL</b>	
Operating Temperature Range	32° to 104°F (0° to 40°C)
Storage Temperature Range	5° to 122°F (-15° to 50°C)
Relative Humidity	5 to 95%, non-condensing
AC Mode BTU / Hr. (Full Load)	1050
AC Mode Efficiency Rating (100% Load)	>94%
AC Economy Mode Efficiency Rating (100% Load)	>98%
Operating Elevation	Up to 6562 ft.
Audible Noise	67.1dB (full load) / 53dB (no load) front side 1m
<b>COMMUNICATIONS</b>	
Network Management Cards	&nbsp;<a class="productLink" href="//tripplite.eaton.com/network-interface-card-for-select-tripp-lite-ups-systems~WEBCARDLXMINI">WEBCARDLXMINI</a>&nbsp;
Network Monitoring Port Description	Includes Pre-installed WEBCARDLXMINI network management card; DB9 port supports RS-232 and Contact-closure signaling
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert software at <a href="https://tripplite.eaton.com/products/power-alert">https://tripplite.eaton.com/products/power-alert</a>
Communications Cable	USB, DB9 serial and EPO cables included
WatchDog Compatibility	Yes
Network Management Card Description	Network management card included
Communications Interface	Contact closure; DB9 Serial; EPO (emergency power off); Pre-installed network card; Slot for SNMP/Web interface; USB (HID enabled)
<b>LINE / BATTERY TRANSFER</b>	
Transfer Time	Online to Battery mode: 0 ms. (Zero transfer time)
Transfer Time (Economy Mode)	Online to Eco mode: 2 milliseconds / Eco to Battery mode: 8 milliseconds
Low Voltage Transfer to Battery Power (Setpoint)	156V (full load) / 100V (50% load or less, derates linearly)
High Voltage Transfer to Battery Power (Setpoint)	275V
<b>FEATURES &amp; SPECIFICATIONS</b>	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
High Availability UPS Features	Auto Probe Monitoring and Reboot (requires WEBCARDLXMINI); Automatic inverter bypass; Hot swappable batteries; Surge/noise protection; Zero transfer time
Green Energy-Saving Features	High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy mode operation; Support for daily startup and shutoff
<b>APPLICATIONS</b>	
UPS Applications	Large Network; Mission Critical Applications



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STANDARDS & COMPLIANCE	
Product Certifications	RETIE (Colombia); CSA (Canada); NOM (Mexico); UL 1778
Product Compliance	RoHS; CE (Europe); ENERGY STAR Qualified; FCC Part 15 Class A (USA); UKCA; Trade Agreements Act (TAA)
WARRANTY & SUPPORT	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 <a class="insuranceLink" href="//tripplite.eaton.com/support/insurance-policy">Ultimate Lifetime Insurance</a>

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