

# 200–240V 5000VA 5000W On-Line Double-Conversion UPS, Unity Power Factor, Hardwire In, HW/C19/C13 Out, 3U

MODEL NUMBER: SU5KRT3UG











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 LossSmartOnline® SU5KRT3UG 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 reconverting UPS output to fully regulated sine wave AC with ±1% voltage regulation and zero transfer time between online and battery modes. Featuring true on-line, double-conversion operation, SU5KRT3UG provides the highest level of UPS power protection for critical server, network and telecom equipment.

Reliable, Expandable Battery BackupUPS 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 14.1 minutes of support at half load and 4.9 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 AccessPre-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

#### **Highlights**

- Unity (1.0) power factor equalizes VA and wattage to safely support more equipment
- Zero transfer time between online 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 missioncritical 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**

- 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



prevent accidental overloads, power loss and downtime. Advanced Communications Ports USB and DB9 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 SU5KRT3UG 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	037332223272	
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	
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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 ±3Hz of nominal; When input frequency is greater than ±3Hz of nominal, output frequency is inverter regulated to ±0.5Hz of nominal; BATTERY MODE: Output frequency is inverter regulated to ±0.5Hz of the configured nominal output frequency; FREQUENCY CONVERSION MODE: Output is inverter regulated to the selected 50/60Hz output setting with ±0.5Hz regulation (de-rates to 70% capacity, bypass not available); FREQUENCY REGULATION MODE: Enables frequency correction to ±0.5Hz of the frequency sensed by the UPS on startup (no de-rating, bypass is available when input frequency is within ±0.5Hz of output)
Load Management Receptacles	Two built-in switchable output load banks; BANK 1 (Set of 2 C19 outlets); BANK 2 (Set of 4 C13 outlets)
Output Circuit Breakers	Two 16A double-pole breakers protect 2 C19 outlets each; 10A double-pole breaker protects 4 C13 outlets
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	(4) C13; (4) C19; Hardwire
Output Voltage Regulation	±1% Inverter output; ±10% Economy mode; ±15% Bypass mode (configurable from ±5% to ±20%); Output voltage THD <2% (full load) / <3% (half load)
Individually Controllable Load Banks	Yes
BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
	Valve Regulated Lead Acid (VRLA) 5 min. (5000W)
Battery Type	
Battery Type Runtime Full Load (min.)	5 min. (5000W)
Battery Type  Runtime Full Load (min.)  Runtime Half Load (min.)	5 min. (5000W)  14 min. (2500W)
Battery Type  Runtime Full Load (min.)  Runtime Half Load (min.)  Expandable Runtime	5 min. (5000W)  14 min. (2500W)  Yes  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 for full
Battery Type  Runtime Full Load (min.)  Runtime Half Load (min.)  Expandable Runtime  Expandable Runtime Description	5 min. (5000W)  14 min. (2500W)  Yes  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 for full integration <a class="productLink" href="//tripplite.eaton.com/External-Battery-Pack-192V-3U-Rack-Tower-BP192V12RT3US" productlink"="">BP192V12RT3US</a> /a>
Battery Type  Runtime Full Load (min.)  Runtime Half Load (min.)  Expandable Runtime  Expandable Runtime Description  External Battery Pack Compatibility  DC System Voltage (VDC)  Battery Recharge Rate (Included	5 min. (5000W)  14 min. (2500W)  Yes  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 for full integration <a class="productLink" href="//tripplite.eaton.com/External-Battery-Pack-192V-3U-Rack-Tower~BP192V12RT3US">BP192V12RT3US</a> <a href="//asahbsp">Asahbsp</a> ;  192  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
Battery Type  Runtime Full Load (min.)  Runtime Half Load (min.)  Expandable Runtime  Expandable Runtime Description  External Battery Pack Compatibility  DC System Voltage (VDC)  Battery Recharge Rate (Included Batteries)	5 min. (5000W)  Yes  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 for full integration <a class="productLink" href="//tripplite.eaton.com/External-Battery-Pack-192V-3U-Rack-Tower~BP192V12RT3US">BP192V12RT3US</a> <a <="" a="" class="productLink" href="//tripplite.eaton.com/External-Battery-Pack-192V-3U-Rack-Tower~BP192V12RT3US"><a class="productLink" href="//tripplite.eaton.com/External-Battery-Pack-192V-3U-Rack-Tower~BP192V12RT3US" productlink"="">BP192V12RT3US</a>&gt;   192  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  Front panel battery access door   <a class="productLink" href="//tripplite.eaton.com/External-Battery-Pack-192V-3U-Rack-Tower~BP192V12RT3US" productlink"="">BP192V12RT3US</a>   192  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  Front panel battery access door   <a class="productLink" href="//tripplite.eaton.com/UPS-Replacement-192VDC-Battery-Cartridge-3U-RBC58-3US">RBC58-3US"&gt;RBC58-3US</a>/a&gt;  (qty 1)</a>
Battery Type  Runtime Full Load (min.)  Runtime Half Load (min.)  Expandable Runtime  Expandable Runtime Description  External Battery Pack Compatibility  DC System Voltage (VDC)  Battery Recharge Rate (Included Batteries)  Battery Access  Internal UPS Replacement Battery Cartridge  Battery Replacement Description	5 min. (5000W)  14 min. (2500W)  Yes  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 for full integration <a class="productLink" href="//tripplite.eaton.com/External-Battery-Pack-192V-3U-Rack-Tower~BP192V12RT3US">BP192V12RT3US</a> 192  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  Front panel battery access door <a class="productLink" href="//tripplite.eaton.com/UPS-Replacement-192VDC-Battery-Cartridge-3U~RBC58-3US">RBC58-3US"&gt;RBC58-3US</a> (qty 1)



Undervoltage Correction	Corrects undervoltages as low as 156V (100% load) / 100V (50% load); derates linearly
USER INTERFACE, ALERTS & CON	TROLS
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
SURGE / NOISE SUPPRESSION	
UPS AC Suppression Joule Rating	1680
UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
PHYSICAL	
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 780 mm (30.7 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 class="productLink" href="//tripplite.eaton.com/2-Post-Rack-Mount-Installation-Kit-3U-Larger-UPS-Transformer-Battery-Pack-Components~2POSTRMKITHD">2POSTRMKITHD</a> ); Tower ( <a class="productLink" href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">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)	74.16
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)	53.57	
UPS Power Module Weight (lbs.)	118.1	
Unit Weight (lbs.)	117.590	
Unit Weight (kg)	53.34	
ENVIRONMENTAL		
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 (ft.)	Up to 6562 ft.	
Audible Noise	67.1dB (full load) / 53dB (no load) front side 1m	
Operating Elevation (m)	Up to 2000m	
COMMUNICATIONS		
Network Management Cards	<a class="productLink" href="//tripplite.eaton.com/network-interface-card-for-select-tripp-lite-ups-systems~WEBCARDLXMINI">WEBCARDLXMINI</a>	
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 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 included	
Communications Interface	Contact closure; DB9 Serial; EPO (emergency power off); Pre-installed network card; Slot for SNMP/Web interface; USB (HID enabled)	
LINE / BATTERY TRANSFER		
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	
FEATURES & SPECIFICATIONS		



Cold-start operation supported		
Auto Probe Monitoring and Reboot (requires WEBCARDLXMINI); Automatic inverter bypass; Hot swappable batteries; Surge/noise protection; Zero transfer time		
High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy mode operation; Support for daily startup and shutoff		
Large Network; Mission Critical Applications		
RETIE (Colombia); CSA (Canada); NOM (Mexico); UL 1778		
RoHS; CE (Europe); ENERGY STAR Qualified; FCC Part 15 Class A (USA); Trade Agreements Act (TAA)		
WARRANTY & SUPPORT		
2-year limited warranty		
\$250,000 <a class="insuranceLink" href="//tripplite.eaton.com/support/insurance-policy">Ultimate Lifetime Insurance</a>		



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