SmartOnline 208 & 120V UPS – On-Line Double Conversion, 5kVA, 4.5kW, 6U, Network Card Option, TAA Compliant

MODEL NUMBER: **SU5000RT4UTFTAA**

208 to 120V UPS protects high- and low-voltage equipment against damage from blackouts, brownouts, surges and line noise.

Features

Protects Mission-Critical Rack-Mounted Equipment against Damage, Downtime and Data Loss This TAA-compatible UPS system protects connected equipment against damage, downtime and data loss due to power outages, voltage fluctuations and transient surges. Featuring a 4500W capacity, high 0.9 power factor, true on-line operation with pure sine wave output and zero transfer time to battery, the SmartOnline® SU5000RT4UTFTAA provides the highest level of battery backup and AC power protection for critical server, network and telecom equipment. The 6U form factor includes a 4U online double-conversion UPS and a 2U step-down isolation transformer, which allows this 208 to 120V UPS system to support both high- and low-voltage equipment.

Reliable Battery Backup with Expandable Runtime OptionsUPS 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 11 minutes of support at half load and 3.5 minutes at full load. During normal operation, incoming utility power keeps the battery fully charged so backup power will be available when needed. For mission-critical applications demanding continuous uptime, the 208 to 120V UPS can provide expandable runtime with optional external battery packs, such as Tripp Lite's field-replaceable, hot-swappable BP192V12RT3UTAA (sold separately). A 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 Operating with a high 96% efficiency in optional economy mode, the SU5000RT4UTFTAA significantly reduces BTU heat output, cooling requirements and operating energy costs.

Intuitive Front-Panel Interface for Convenient UPS Operation and Monitoring Front-panel LEDs indicate line power, online mode, economy/bypass mode, on-battery, charger and AC output status at a glance. 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.

Surge Protection and EMI/RFI Line Noise Filtering Keep Your Equipment Safe Network-grade surge protection instantaneously safeguards connected components from the harmful effects of power surges.

Highlights

- Zero transfer time between AC power and battery for uninterrupted operation
- 96% efficiency in economy mode uses less electricity and helps lower operating costs
- 2U step-down transformer supports power protection of both high- and low-voltage components
- Optional external batteries provide additional runtime for essential applications
- Complies with the Federal Trade Agreements Act (TAA) for GSA Schedule purchases

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

- SU5000RT4UHVTAA double-conversion UPS system
- SU5000XFMR2UTAA step-down isolation transformer
- USB cable
- DB9 cable
- EPO cable
- Rack-mounting hardware
- Owner's manual

Various electrical and radio sources can also cause disruptive interference on the AC line, which can result in incremental hardware damage, data corruption and performance problems. By providing regulated, filtered, pure sine wave AC output, the SU5000RT4UTFTAA completely isolates connected equipment from disruptive line noise.

Optional WEBCARDLX Network Interface Offers 24/7 Access An accessory slot accommodates the optional Java-free HTML5-based WEBCARDLX interface (sold separately), which 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 PortsUSB and DB9 ports (cables are included) enable data-saving unattended shutdown of connected systems when used with Tripp Lite's free downloadable PowerAlert® software. Capabilities include detailed monitoring of load levels, self-test data and utility power conditions.

Versatile Installation Options Hardware is included for mounting the 208 to 120V UPS system in 6U of space in an EIA-standard 19-inch 4-post rack. Use two optional 2POSTRMKITHD kits for 2-post rack mounting or the optional 2-9USTAND for mounting in an upright tower position.

TAA-Compliant UPS for GSA Schedule Purchases The SU5000RT4UTFTAA is compliant with the Federal Trade Agreements Act (TAA) for GSA Schedule purchases.

2-Year Warranty and $250K Ultimate Lifetime Insurance The SU5000RT4UTFTAA 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).

Specifications

OVERVIEW	
UPC Code	037332224491
UPS Type	On-Line

INPUT	
Input Phase	Single-Phase
Rated input current (Maximum Load)	24A (208V)
Nominal Input Voltage(s) Supported	208V AC
UPS Input Connection Type	L6-30P
UPS Input Cord Length (ft.)	10
UPS Input Cord Length (m)	3.1
Recommended Electrical Service	30A

OUTPUT	
Output Capacity (VA)	5000
Output Capacity (kVA)	5
Output Capacity (Watts)	4500
Output Capacity (kW)	4.5

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 the overload is cleared
Power Factor	0.9
Crest Factor	3:1
Nominal Voltage Details	208V default power module setting; This configuration requires the Power Module be set to 208V output voltage; Included step-down transformer supports 120V output
Frequency Compatibility	60 Hz
Frequency Compatibility Details	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 Circuit Breakers	High voltage 20A breaker protects L6-20R outlets, L6-30R outlets are unbreakered; Low voltage 20A breakers protect 3 5-15/20R outlets each
Output AC Waveform (AC Mode)	Pure sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
Nominal Output Voltage(s) Supported	120V; 208V
Output Receptacles	(12) 5-15/20R; (2) L6-20R; (2) L6-30R
Individually Controllable Load Banks	No
BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
Runtime Full Load (min.)	3.5 min. (4500W)
Runtime Half Load (min.)	11 min. (2250W)
Expandable Runtime	Yes
External Battery Pack Compatibility	BP192V12RT3UTAA ; BP192V787C-1PH
DC System Voltage (VDC)	192
Battery Recharge Rate (Included Batteries)	6 hours from 10% to 90% (typical, full load discharge)
Battery Access	Front panel battery access door
Internal UPS Replacement Battery Cartridge	RBC5-192 (qty 1)
Battery Replacement Description	Hot-swappable, user replaceable batteries
VOLTAGE REGULATION	

Voltage Regulation Description	Online, double-conversion power conditioning
Overvoltage Correction	2% output voltage regulation during overvoltages to 280V (full load) / 300V (90% load or less)
Undervoltage Correction	2% output voltage regulation during undervoltages to 156V (full load) / 100V (50% load or less)

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)
Switches	2 Switches control off/on power status and alarm-cancel/self-test operation; 2 additional switches support set and execute scrolling 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	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	2595
UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes

PHYSICAL	
Primary Form Factor	Rackmount
Rack Height	6U
Cooling Method	Fan
Included Mounting Accessory Description	2 sets of adjustable 4 post rack rails included
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount
Installation Form Factors Supported with Optional Accessories	2 post rackmount (2POSTRMKITHD); Tower (2-9USTAND)
Maximum Device Depth (cm)	53.34
Maximum Device Depth (in.)	21
Maximum Device Depth (mm)	533
Minimum Required Rack Depth (cm)	7.62
Minimum Required Rack Depth (inches)	3
Minimum Required Rack Depth with External Battery Pack (cm)	74
Minimum Required Rack Depth with External Battery Pack (in.)	29

Minimum Required Rack Depth without External Battery Pack (cm)	65
Minimum Required Rack Depth without External Battery Pack (in.)	25.75
Optional Mounting Accessory Notes	2 sets of 2POSTRMKITHD required for 2 post rackmount installation of separate 4U power module and 2U transformer
Primary UPS Depth (mm)	525
Primary UPS Height (mm)	174
Primary UPS Width (mm)	445
Shipping Dimensions (hwd / in.)	22.20 x 23.60 x 29.10
Shipping Dimensions (hwd / cm)	56.39 x 59.94 x 73.91
Shipping Weight (lbs.)	227.80
Shipping Weight (kg)	103.33
Stepdown Transformer Dimensions (hwd / cm)	8.89 x 44.45 x 52.70
Stepdown Transformer Dimensions (hwd / in.)	3.50 x 17.50 x 20.75
Stepdown Transformer Height (mm)	89
Stepdown Transformer Width (mm)	445
Stepdown Transformer Depth (mm)	527
Stepdown Transformer Weight (kg)	34.47
Stepdown Transformer Weight (lbs.)	76
UPS Housing Material	Sheet metal
UPS Power Module Dimensions (hwd, cm)	17.40 x 44.45 x 52.50
UPS Power Module Dimensions (hwd, in.)	6.85 x 17.50 x 20.67
UPS Power Module Weight (kg)	51.71
UPS Power Module Weight (lbs.)	114

ENVIRONMENTAL	
Operating Temperature Range	+32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius
Storage Temperature Range	5 to 122 F / -15 to 50 C
Relative Humidity	5% to 90% (non-condensing)
AC Mode BTU / Hr. (Full Load)	1767
AC Economy Mode BTU / Hr. (Full Load)	640
AC Mode Efficiency Rating (100% Load)	90%

AC Economy Mode Efficiency Rating (100% Load)	96%
Battery Mode Heat Dissipation (BTU/Hr) @ Full Load	1708
Operating Elevation (ft.)	0 to 6560 ft. / 0 to 2000 m
Audible Noise	65 dB at 1m front side
Operating Elevation (m)	0-2000 m

COMMUNICATIONS

Network Management Cards	SNMPWEBCARD; TLNETCARD ; WEBCARDLX; MODBUSCARD ; RELAYIOCARD
Network Monitoring Port Description	Two contact closure monitoring options available - RELAYIOCARD with six configurable contact closure outputs (uses UPS card slot) and RELAYIOMINI with 3 configurable contact closure outputs (requires removal of USB port 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)

FEATURES & SPECIFICATIONS

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 batteries; On-Line/Double-Conversion; Remote management; Sine wave output; Surge/noise protection; Zero transfer time
Green Energy-Saving Features	High efficiency economy mode operation; Support for daily startup and shutoff; Schedulable daily hours of economy mode operation

APPLICATIONS

UPS Applications	Mission Critical Applications

STANDARDS & COMPLIANCE

Product Certifications	CSA (Canada); UL 1778

Product Compliance	RoHS; FCC Part 15 Class B (USA); Trade Agreements Act (TAA)
WARRANTY & SUPPORT	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	$250,000 Ultimate Lifetime Insurance