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Model #: SU16000RT4U

SmartOnline Hot-Swappable Modular UPS System - On-line, double-conversion protection for mission critical applications



Highlights

- 16,000VA / 16kVA online 4U rack / tower UPS with expandable runtime (4U Power Module + 4U Battery Pack)
- Maintains dual 208/120 or 240/120V output +/-3% during brownouts and overvoltages (4 wire split-phase input)
- Simultaneous use HID compliant USB port, serial port, SNMP/Web card slot and EPO interface - front panel LCD digital display for real-time site electrical and detailed UPS operating parameters
- Detachable hardwire input & outlet panel with manual bypass and fault tolerant design enables hot-swap UPS replacement without powering off connected equipment
- Expandable runtime with optional BP192V18-4U external battery packs
- \$250,000 [Ultimate Lifetime Insurance](#) (USA, Puerto Rico & Canada only)

Description

Tripp Lite 16kVA SmartOnline Hot-Swappable Modular Rack/Tower UPS offers 16,000 VA on-line, double-conversion UPS support for server, network and telecommunications equipment. Maintains battery-derived AC output during blackouts with active, full-time power conditioning. Fault-tolerant auto-bypass prevents unexpected service interruptions during overload or internal fault conditions. 4U power module and 4U external battery pack installs in 8 rack spaces (8U). Upright tower installation supported with optional accessories. Maintains full-time sine wave output within 3% of selectable 208/120 or 240/120V AC. Corrects brownouts and overvoltages from 65V to 140V (L-N). Expandable runtime with optional external battery packs. Converts raw input from AC to DC, then resynthesizes output power back to perfect sine wave AC output with enhanced protection from harmonic distortion, fast electrical impulses and other hard-to-solve power problems not addressed by other UPS types. Network-grade AC surge and noise suppression. Network management interfaces include combination DB9 RS-232 enabled and dry contact serial port, enhanced USB port and SNMPWEBCARD slot. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X. Supports simultaneous detailed monitoring of equipment load levels, self-test data and utility power conditions via all 3 network interfaces. Includes PowerAlert monitoring software and complete cabling. Supports Emergency Power Off (EPO) via built-in interface. Front panel LEDs and LCD readout with scroll controls support visual monitoring of all major UPS functions. LED/LCD display panel easily rotates for viewing in rackmount or tower configurations. Split phase 4 conductor hardwire input. UPS supported outlets include two L6-30R, six C19 and 5 low voltage 5-15/20R. Output connections are mounted on a detachable backplate with manual bypass switch to enable hot-swappable UPS replacement without powering off connected equipment. External battery packs are field replaceable and hot swappable. Attractive all-black color scheme. 2-year warranty and \$250,000 [connected equipment insurance](#); extended warranty and service contracts available.

Applications

- Ideal for protection of sensitive electronics in any application calling for upright tower or 19-inch rackmount UPS protection. Common applications include any mix of servers, workstations, hubs, routers, concentrators, IP telephony and traditional PBX switching systems.

Package Includes

- 16kVA/16,000 VA UPS power module in 4U rackmount housing
- Detachable hardwire input/output and output receptacle PDU
- External 4U battery pack
- 4 post rackmount installation brackets

Features

- True online, double-conversion UPS provides pure, full-time sine wave AC output free of surges, voltage fluctuations and line noise
- 16,000 VA/11,200 watt output power capacity with dual voltage output of 208/120 or 240/120V
- 4U high power density power module and 4U external battery pack supports rackmount installation in 8 rack spaces
- Dual conversion UPS actively converts raw input from AC to DC, then back to perfect sine wave AC output with enhanced protection from harmonic distortion, fast electrical impulses and other hard-to-solve power problems not addressed by other UPS types
- Hardwire input terminals and output receptacles are mounted on a detachable backplate with manual bypass switch to enable hot-swappable UPS replacement without powering off connected equipment
- Provides perfectly regulated, sine wave output power free of line noise, transient surges and frequency variation for the most efficient operation of critical servers, networking and telecommunications equipment
- Maintains output within 3% of selected 208/120 or 240/120V nominal voltage during brownouts and overvoltages
- Supports connected equipment during blackouts for 12/5 minutes at half/full load levels, runtime is further expandable with optional external BP192V18-4U battery packs
- Network interfaces support simultaneous communications via DB9 port, USB port and SNMPWEBCARD slot. DB9 port supports RS-232 and dry contact messaging. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X.
- Included PowerAlert UPS monitoring software supports safe unattended shutdown, monitoring and control via local connected servers, plus any number of additional servers over IP
- Communications ports support on-battery, low-battery, power-restored, AC-voltage, DC-voltage, output current monitoring, battery charge current, battery capacity, AC line frequency, timed inverter shutoff, activate self-test and output power control
- Built-in Emergency Power Off (EPO) interface with cable
- Includes 13 output receptacles (2 L6-30R, 6 C19, 5 NEMA 5-15/20R), all of which are available for simultaneous use
- Split phase, 4 conductor hardwire input connection (featured on included detachable PDU).
- Front panel LEDs and LCD readout with scroll button enables visual confirmation of all major UPS functions and current site electrical conditions
- Front panel switches enable power on/off control, self-test and alarm cancel functions
- Included adjustable mounting rails support installation in 4 post 19 inch rack enclosures
- Optional 2-9U STAND set of tower stands supports upright tower installation
- Fault-tolerant auto-bypass maintains continuous utility output to connected equipment, even in cases where the UPS is overloaded or suffers an internal failure that requires service
- 2 year manufacturer's product warranty, \$250,000 [Ultimate Lifetime Insurance](#) (USA & Canada only)

Specifications

SYSTEM OVERVIEW	
System overview	16kVA / 16,000 VA online, double conversion UPS with detachable PDU backplate
Voltage compatibility	208/120 or 240/120V split phase, 4 wire
Frequency compatibility	60Hz
OUTPUT	
Output VA	16000 (240v) / 13860 (208V)
Output watts	11200
Output nominal voltage	208/120 or 240/120V
Output voltage regulation	Maintains pure sine wave output at all times, regulated within 3% of selected nominal output voltage, less than 5% total harmonic distortion
Output frequency regulation	Regulates line frequency to 60Hz +/- 0.05Hz
Outlet quantity / type	Includes 2 L6-30R, 6 C19 and 5 5-15/20R

Sold by:



Overload protection	Circuit breaker protection on detachable PDU backplate
INPUT	
Maximum input amps	68A
Input connection type	Hardwire
BATTERY	
Full load runtime	5 minutes (11,200 watts) - expandable
Half load runtime	12 minutes (5600 watts) - expandable
Expandable battery runtime	Yes, with optional BP192V18-4U
DC system voltage	192V
Typical battery lifespan	4-6 years (typical)
Battery recharge rate	6 hour recharge to 80%
Replacement Battery Cartridge	Replace entire battery pack
VOLTAGE REGULATION	
Voltage regulation description	Maintains 208/120 or 240/120V output +/-3%
Overvoltage correction	Corrects overvoltages as high as 140V (L1-N:L2-N)
Brownout correction	Corrects brownouts as low as 65V (L1-N:L2-N)
LEDS ALARMS & SWITCHES	
Front panel LEDs	6 LED DISPLAY: line power, bypass, inverter, charger, output AC and battery operation. SELECTABLE LCD DISPLAY: input/output voltage, Hz, battery voltage and charge level and detailed warnings regarding all major UPS functions.
Alarms	Multi-function audible alarm offers notification of UPS start, backup operation, low battery, overload, UPS fault, inverter fault, DC bus fault, overtemperature, remote shutdown, shutdown imminent and shutdown complete
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 output power
SURGE / NOISE SUPPRESSION	
AC surge suppression	Network grade surge suppression conforms to IEEE 587 / ANSI C62.41 specifications
AC suppression response time	Instantaneous
EMI / RFI AC noise suppression	Yes
PHYSICAL	
Shipping weight (lbs)	448.8
Shipping weight (kg)	203.75
Unit weight (lbs)	Power module: 86 / Detachable PDU backplate: 13.25 / BP192V18-4U battery pack: 239
Unit weight (kg)	Power module: 39 / Detachable PDU backplate: 6.1 / BP192V18-4U battery pack: 108.5
Unit Dimensions (HWD/in)	Power module with PDU backplate installed: 7 x 17.5 x 40.5 / BP192V18-4U battery pack: 7 x 17.5 x 27.8
Unit Dimensions (HWD/cm)	Power module with PDU backplate installed: 17.8 x 44.45 x 102.9 / BP192V18-4U battery pack: 17.8 x 44.45 x 70.6
Shipping Dimensions (HWD/in)	45.5 x 23.5 x 34.25



Shipping Dimensions (HWD/cm)	115.57 x 59.7 x 87
Material of construction	Steel
Form factors supported	8U (4U power module + 4U battery pack)
Cooling method	Fan
Battery Access	External battery pack supports hot-swappable battery replacement
ENVIRONMENTAL	
Relative Humidity	0 to 95%, non-condensing
Line mode BTU/hr. (Max.)	5715 BTU/HR (full load) / 3114 BTU/HR (half load)
Battery mode BTU/hr. (Max.)	4248 BTU/HR (full load) / 2124 BTU/HR (half load)
Operating Elevation (ft)	0-3000m (0 to 10,000 ft.)
COMMUNICATIONS	
Network monitoring port	Includes USB and DB9 serial ports. Built-in DB9 port offers both enhanced RS-232 enabled monitoring data, plus contact closure monitoring ability. HID-compliant USB interface enables integration with built-in power management and auto shutdown features
Software and cabling included	Includes PowerAlert UPS monitoring software for all common network and standalone operating systems. Cabling included.
SNMP compatibility	Built-in accessory slot accommodates internal SNMP / Web card and other network accessories
LINE / BATTERY TRANSFER	
Transfer time from line power to battery mode	Zero, on-line UPS continuously converts incoming AC to DC, then back to AC. When line power is interrupted, UPS maintains continuous output from battery reserves with absolutely no disruption in output AC power.
Low voltage transfer to battery power	Maintains continuous operation during undervoltages as low as 65V (L1-N:L2-N). Below this point, output is maintained utilizing battery reserves.
High voltage transfer to battery power	Maintains continuous operation during overvoltages to 140V (L1-N:L2-N). Above this point, output is maintained utilizing battery reserves.
CERTIFICATIONS	
Certifications†	Tested to UL1778 (USA), CSA C22.2 No. 107.3 (Canada), Class A (Emissions), NOM (Mexico)
WARRANTY	
Product warranty	2 year product warranty
Connected equipment insurance (USA and Canada Only)	\$250,000 connected equipment insurance (USA, Puerto Rico and Canada only)
Optional coverage	3 year, 5 year, next day and on-site warranty coverage available
SPECIAL FEATURES	
EPO port	Includes dedicated EPO (emergency power off) interface and cabling
Cold Start	Yes, inverter can be "cold started" to enable temporary AC output during a power failure
Appearance	Attractive black steel rackmount housing
BATTERY PACK ACCESSORY (optional)	
Battery Pack Accessory (optional)	BP192V18-4U



More information, including related products, owner's manuals, and additional technical specifications, can be found online at www.tripplite.com/products/model.cfm?txtModelID=3652.

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