

## Model #: SU2200XLA

# SmartOnline Expandable Tower UPS System - On-line, double-conversion protection for mission-critical applications



## **Highlights**

2200VA on-line, double-conversion, expandable runtime tower UPS system Simultaneous communications via HID-compliant USB port, serial port, and SNMP/web card slot

Maintains 120V +/-2% output during overvoltages to 138V and brownouts as low as 65V

NEMA 5-20P (120V 20A) input plug; 6 NEMA 5-15/20R and 1 L5-20R outlets; two individually controllable three-outlet load banks

Fault-tolerant auto-bypass

2-year product warranty;

## **Description**

Tripp Lite's Smart Online SU2200XLa on-line, double conversion UPS protects critical server, networking or telecommunications equipment from blackouts, brownouts, voltage fluctuations and surges in an attractive all-black upright tower form factor. Large capacity 2200VA/1600W UPS continuously converts incoming AC to DC, then back to perfect sine wave AC output at 120V AC (+/-2%). Removes harmonic distortion, fast electrical impulses, frequency fluctuations and other hard-to-solve power problems not addressed by other UPS systems. True sine wave output and zero transfer time offers guaranteed compatibility with all equipment types. Includes 7 UPS supported outlets. 2 three-outlet load banks can be independently controlled via software interface to selectively reboot remote equipment or automatically shed less critical loads to extend battery runtime for the most critical equipment. Battery support can be extended with the addition of external battery packs. Includes slot for internal SNMP/web card, plus DB9 enhanced serial monitoring port for unattended shutdown, remote control and monitoring of UPS system and power data. Network management interfaces support simultaneous communications via USB port, DB9 serial 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. Includes Tripp Lite's PowerAlert UPS Power Management Software. Compatible with Tripp Lite's Watchdog Service Monitoring and Control Software.

#### Applications

Ideal for protection of critical 120V equipment in server rooms, internetworking closets and telecommunications systems in rackmount or tower applications. Common applications include corporate or departmental servers, workstations, hubs, routers, bridges, CAD/CAM workstations, concentrators, IP telephony and traditional PBX switching systems.

## Package Includes

SU2200XLa On-line Double-Conversion UPS System PowerAlert Software and cabling Instruction manual with warranty information EPO (Emergency Power Off) cabling

## **Features**

True on-line, double conversion UPS provides a constant, pure sine wave AC output

Maintains continuous operation through blackouts, brownouts, voltage fluctuations and surges with zero transfer time

Removes harmonic distortion, electrical impulses, frequency variations and other hard-to-solve power problems

Accepts input voltages between 80V and 138V (65V to 138V at loads under 70%), regulating output to 120V AC +/-2%

2200VA/1600W output capacity with 7 total outlets (6 NEMA5-15/20R and 1 L5-20R)

Two built-in individually switchable load banks, each with three outets, can be controlled via software interface to selectively reboot remote equipment or automatically shed less critical loads to extend battery runtime for the most critical equipment

Standard internal battery set provides 14 min. runtime at half load and 4.5 min. at full load

Runtime is expandable with BP48V24-2U (limit 1) or BP48V60RT3U (multi-pack compatible) external battery packs

Attractive all-black upright tower format

Simultaneous communications via HID-compliant USB port, serial port, and SNMP/web card slot

HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X DB9 serial network interface supports RS-232 and contact closure messaging

Slot for optional SNMP/web card (part #: SNMPWEBCARD)

Included PowerAlert UPS Power Management Software and cabling provides monitoring of in-depth site power conditions, full UPS status and fault warnings, output load level and load bank power control

Compatible with Tripp Lite's WatchDog Service Monitoring and Control Software (part# WATCHDOGSW)

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

Diagnostic LEDs

2-year product warranty

## **Specifications**

SYSTEM OVERVIEW		
Voltage compatibility	120V AC (110/120V)	
Frequency compatibility	50/60 Hz compatible (auto-sensing)	
OUTPUT		
Output VA	2200	
Output watts	1600	
Output nominal voltage	120V AC (110/120V)	
Output voltage regulation	Maintains full-time sine wave output within 2% of selected nominal, less than 3% total harmonic distortion (linear load) / 5% total harmonic distortion (computer load) (Less than 5% THD on-line and on-battery)	
Output frequency regulation	Regulates line frequency to 50/60Hz +/- 0.05Hz	
Outlet quantity / type	6 x NEMA 5-15/20R, 1 x NEMA L5-20R	
Customized load management receptacles	2 controllable load banks, each with 3 outlets, support load shedding and remote reboot on demand of locked network devices	
Overload protection	30A input breaker	
INPUT		
Maximum input amps	16A (120V) / 17.6 (110V)	
Input connection type	NEMA 5-20P (user-installable NEMA 5-15P also included)	
Input cord length	10ft / 3m	
Recommended Electrical Service	120V 20A dedicated circuit	
BATTERY		
Full load runtime	4.5 min. with internal batteries (1600W)	
Half load runtime	14 min. with internal batteries (800W)	

Expandable battery runtime	Runtime is expandable with BP48V24-2U (limit 1) or BP48V60RT3U (multi-pack compatible) external battery packs	
DC system voltage	48VDC	
Typical battery lifespan	3-6 years, depending on usage	
Battery recharge rate	Less than 5 hours to 90%	
Replacement Battery Cartridge	RBC48-SUTWR	
VOLTAGE REGULAT	ION	
Voltage regulation description	On-line, double-conversion power conditioning maintains output within 2% of 100/110/120 volts at all times	
Overvoltage correction	Maintains output of selected nominal +/-2% during overvoltages to 138V AC	
Brownout correction	Maintains output of selected nominal +/-2% during undervoltages to 65V AC (at loads greater than 70% undervoltage correction extends to 80V)	
LEDS ALARMS & SW	ITCHES	
Front panel LEDs	LED STATUS DISPLAY: line power (green), online (green), bypass (yellow), on battery (green), overload (red), battery low (yellow) - 4 LED LOAD / BATTERY LEVEL DISPLAY (100%, 75%, 50%, 25%). LED display panel easily rotates for better viewing in rackmount or tower configurations.	
Alarms	Multi-function audible alarm with distinctive ring patterns offer notification of backup operation (2 sec. on / 0.5 sec. off), low battery warning (1.25 sec. on / 0.5 sec. off), overload (sounds continuously), UPS fault (4.2 sec. on / 1 sec. off), inp voltage out of frequency (2.1 sec. on / 0.14 sec. off) and high input voltage (2.1 sec. on 0.07 sec. off)	
Switches	Includes power off/on switch to enable system turn on (press ON switch), UPS battery test (press ON switch during normal AC operation), buzzer silence (press ON switch during battery operation) and OFF (press OFF switch) - all switch functions require that the switch be pressed and held for longer than 2 sec. but less than 4 sec.	
SURGE / NOISE SUP	PRESSION	
AC surge suppression	570 joules	
AC suppression response time	Instantaneous	
Dataline suppression	Set of 8 wire RJ-style interface jacks provides surge suppression for network Ethernet or tel/DSL connection. Pins 1,2,3 and 6 offer Ethernet protection starting at 7.5V and the center two wires, pins 4 & 5, offer tel/DSL line suppression starting at 260V	
EMI / RFI AC noise suppression	Yes	
PHYSICAL		
Shipping weight (lbs)	59.5	
Shipping weight (kg)	27	
Shipping Dimensions (HWD/in)	15.25 x 13 x 24	
Shipping Dimensions (HWD/cm)	38.7 x 33 x 61	
Unit weight (lbs)	52.7	
Unit weight (kg)	23.9	
Unit Dimensions (HWD/in)	10.25 x 9 x 19.5	
Unit Dimensions (HWD/cm)	26 x 22.9 x 49.5	

Material of construction	Steel
Form factors supported	Tower
Cooling method	Built-in cooling fan
Battery Access	User-replaceable, hot-swap battery replacement supported via battery access panel
ENVIRONMENTAL	
Operating Temperature	+32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius
Storage Temperature	+5 to +122 degrees Fahrenheit / -15 to +50 degrees Celsius
Relative Humidity	0 to 95%, non-condensing
Line mode BTU/hr. (Max.)	816
Battery mode BTU/hr. (Max.)	889
Audible Noise	
COMMUNICATIONS	
Network monitoring port	USB port and DB9 serial port. DB9 port offers both enhanced RS-232 enabled monitoring data, plus contact closure monitoring ability. HID-compliant USB port enables integration with built-in power management and auto shutdown features of Windows and Mac OS
Software and cabling included	PowerAlert Software on CD-ROM and complete cabling
SNMP compatibility	Slot for optional SNMPWEBCARD accessory (part #: SNMPWEBCARD)
WatchDog compatibility	Compatible with Tripp Lite's Watchdog Service Monitoring and Control Software to restore operation to locked equipment through soft reboot of application/OS or hard power off/on reboot of connected equipmentideal for unattended kiosk applications
LINE / BATTERY TRA	NSFER
Transfer time from line power to battery mode	Zeroonline UPS continuously converts incoming AC to DC, then back to AC. When commercial 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 (80V at load levels over 70%). Below this switchover point, output is supported from battery-derived AC power
High voltage transfer to battery power	Maintains continuous operation without using battery power during overvoltages to 138V. Above this point, output is supported from battery-derived AC power
SPECIAL FEATURES	
EPO port	Supports "Emergency Power Off" via set of dedicated built-in EPO jacks
Cold Start	Inverter can be cold started to enable temporary AC output during a power failure
Appearance	Attractive all-black color scheme
BATTERY PACK ACC	CESSORY (optional)
Battery Pack Accessory (optional)	BP48V24-2U (limit 1) or BP48V60RT3U (multi-pack compatible)
CERTIFICATIONS	
Certifications	Tested to UL1778 (USA), CSA (Canada), NOM (Mexico), Class A (emissions), FCC Part 68/Industry Canada, RoHS compliant
WARRANTY	
Product warranty	2 years

Optional coverage	3-5 year warranties, plus next-day and on-site warranty coverage available for select opportunities

## **Related Items**

Extended Warranties		
WEXT3-2200-3000	3-Year Extended Warranty - For Smart Line-Interactive and Online Tower or Rack models, 2200-3000VA	Qty: [optional]
WEXT5-2200-3000	5-Year Extended Warranty - For Smart Line-Interactive and Online Tower or Rack models, 2200-3000VA or less	Qty: [optional]
External Battery Packs		
BP48V24-2U	BP48V242U - External Battery Pack for UPS System	Qty: [optional]
BP48V60RT-3U	External Battery Pack and Cable. 3U, Expandable, Blue 2-Point Connector	Qty: [optional]
Power Distribution		
PS7224-20T	Tripp Lite Power Strip - Multiple outlets wherever you need them	Qty: [optional]
PDU1220T	Basic PDU / Power Distribution Unit - Safe, reliable power distribution for critical networking equipment	Qty: [optional]
PDUMV20	Metered PDU / Power Distribution Unit - Safe, reliable power distribution with digital current meter	Qty: [optional]
PDUMH20ATNET	Switched, Metered PDU with ATS - Power Distribution Unit with dual-input Auto Transfer Switching, individual outlet control and SNMP network interface	Qty: [optional]
Shutdown Cable Kits		
AS400CABLE KIT	Power Management Tools - UPS Communication Cable Kit for System i / AS400 / iSeries Servers	Qty: [optional]
SNMP Accessories		
ENVIROSENSE	Power Management Tools - Environmental Sensor	Qty: [optional]
SNMPWEBCARD	Power Management Tools - Internal SNMP/Web Card	Qty: [optional]
Surge Protectors		
DTEL2	Network Surge Suppressor - Essential protection for data and communication lines	Qty: [optional]
DNET1	Network Surge Suppressor - Essential protection for data and communication lines	Qty: [optional]
DCATV	Network Surge Suppressor - Essential protection for TV/VCR coaxial lines	Qty: [optional]

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