

## SmartOnline 120V 1.5kVA 1.2kW Double-Conversion UPS, Tower, Extended Run, Network Card Options, USB, DB9 Serial

MODEL NUMBER: SU1500XL



### Description

Tripp Lite's SmartOnline SU1500XL on-line, double conversion UPS protects critical server, networking or telecommunications equipment from blackouts, brownouts, voltage fluctuations and surges. Large-capacity 1.5kVA/1200W 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 provides guaranteed compatibility with all equipment types. Highly efficient operation in optional economy mode setting, saving BTU heat output and energy costs. Includes 6 UPS-supported outlets. 2 load banks, each with 3 outlets, can be independently controlled via a software interface to selectively reboot remote equipment or automatically shed less critical loads to extend battery runtime for the most critical equipment. Battery backup time can be extended with the addition of multiple external battery packs. Includes slot for network management card options, plus DB9 enhanced serial monitoring port for unattended shutdown, remote control and monitoring of UPS system and power data. HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X. Tripp Lite's PowerAlert UPS Management Software is available via free download. Compatible with Tripp Lite's Watchdog Service Monitoring/Rebooting Software. Attractive all-black upright tower format. \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only)

### Features

- True on-line, double conversion UPS provides constant, pure sine wave AC output
- Zero transfer time, on-line, double-conversion and economy-mode operation supported
- 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 150V (65V to 150V at loads under 70%), regulating output to 120V AC +/-2%
- 1500VA/1200W output capacity with 6 NEMA 5-15R outlets
- Two built-in, individually switchable load banks, each with 3 outlets, 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

### Highlights

- 1500VA / 1.5kVA / 1200 watt on-line double-conversion tower UPS
- 120V +/-2% output at 50/60Hz, high efficiency economy mode option
- Expandable runtime, Hot-swappable battery modules
- USB, RS232 & EPO ports; support for network management card options
- Front panel status LEDs with detailed load and battery metering
- 2 independently switchable output load banks
- NEMA 5-15P input; 5-15R outlets
- To use the Auto Probe feature, this product requires a WEBCARDLX network interface (sold separately) running LX firmware update 15.5.2 or later

### Package Includes

- SU1500XL UPS System
- USB, DB9 and EPO cabling
- Owner's manual with warranty information

- Standard internal battery set provides 14 min. runtime at half load and 4.5 min. at full load
- Runtime is expandable with BP48V60RT-3U and BP48V27-2US external battery packs
- Intelligent battery management system extends battery life
- Some external battery configurations require the use of Tripp Lite's External Battery Configuration Software (see manual)
- Attractive all-black upright tower format
- Simultaneous communications via HID-compliant USB port, DB9 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
- USB & Serial ports enable data-saving unattended shutdown when used with Tripp Lite's PowerAlert software, available via FREE download from [tripplite.eaton.com/products/power-alert](http://tripplite.eaton.com/products/power-alert)
- DB9 serial network interface supports RS-232 and contact closure messaging
- Compatible with Tripp Lite UPS management card options TLNETCARD, WEBCARDLX, SNMPWEBCARD, MODBUSCARD and RELAYIOCARD
- Compatible with Tripp Lite's WatchDog Service Monitoring/Rebooting Software (part # WATCHDOGSW)
- Fault tolerant electronic bypass maintains utility output during a variety of UPS fault conditions
- Diagnostic LEDs
- Built-in RJ-11 EPO (Emergency Power Off) jack allows connection to site emergency power off systems
- \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only) for connected equipment (USA and Canada Only)

## Specifications

OVERVIEW	
UPC Code	037332125859
UPS Type	On-Line
INPUT	
Input Phase	Single-Phase
Rated input current (Maximum Load)	12A
Nominal Input Voltage(s) Supported	120V AC
UPS Input Connection Type	5-15P
Input Circuit Breakers	20A
UPS Input Cord Length (ft.)	10
UPS Input Cord Length (m)	3.1
Recommended Electrical Service	15A 120V
OUTPUT	
Output Capacity (VA)	1500
Output Capacity (kVA)	1.5

Output Capacity (Watts)	1200
Output Capacity (kW)	1.2
Output Capacity Details	OVERLOAD CAPACITY: Supports inverter operation up to 105% load continuously, 125% load for 3 minutes; 150% load for 30 seconds and >150% load for 0.5 seconds before switching to BYPASS (when bypass input voltage and frequency are WITHIN bypass limits) or SHUTDOWN (when bypass input voltage or frequency are OUTSIDE bypass limits)
Power Factor	0.8
Crest Factor	3:1
Frequency Compatibility	50 / 60 Hz
Frequency Compatibility Details	Output frequency matches input nominal on startup, defaults to 60 Hz on cold-start
Output Voltage Regulation (Line Mode)	+/- 2%
Output Voltage Regulation (Economy Line Mode)	+/- 10%
Output Voltage Regulation (Battery Mode)	+/- 2%
Load Management Receptacles	Two switchable three-outlet 5-15R load banks
Output AC Waveform (AC Mode)	Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
Nominal Output Voltage(s) Supported	120V
Output Receptacles	(6) 5-15R
Individually Controllable Load Banks	Yes
<b>BATTERY</b>	
Battery Type	Valve Regulated Lead Acid (VRLA)
Runtime Full Load (min.)	4.5 min. (1200W)
Runtime Half Load (min.)	14 min. (600W)
Expandable Runtime	Yes
External Battery Pack Compatibility	<a href="http://tripplite.eaton.com/External-48V-2U-Rack-Tower-Battery-Pack-for-UPS-Systems~BP48V27-2US">BP48V27-2US</a> (multi-pack compatible); <a href="http://tripplite.eaton.com/External-48V-3U-Rack-Tower-Battery-Pack-Enclosure-DC-Cabling-select-UPS-Systems~BP48V60RT-3U">BP48V60RT-3U</a> (multi-pack compatible)
DC System Voltage (VDC)	48
Battery Recharge Rate (Included Batteries)	Less than 6 hours from 10% to 90% (typical, full load discharge)
Battery Access	Battery access door
Internal UPS Replacement Battery Cartridge	<a href="http://tripplite.eaton.com/UPS-Replacement-48VDC-Battery-Cartridge~RBC48-SUTWR">RBC48-SUTWR</a>
Battery Replacement Description	Hot-swappable, user replaceable batteries
<b>VOLTAGE REGULATION</b>	

Voltage Regulation Description	Online, double-conversion power conditioning
Overvoltage Correction	2% output voltage regulation during overvoltages to 150
Undervoltage Correction	2% output voltage regulation during undervoltages to 80
Severe Undervoltage Correction	2% output voltage regulation during undervoltages to 65 (under 70% load only)
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	
Switches	2 Switches control off/on power status and alarm-cancel/self-test operation
Audible Alarm	Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions
LED Indicators	14 LEDs indicate line power, online mode, economy/bypass mode, on-battery, overload, battery low, replace battery and fault status information - includes 4-LED meter display for load and battery charge level
<b>SURGE / NOISE SUPPRESSION</b>	
UPS AC Suppression Joule Rating	570
UPS AC Suppression Response Time	Instantaneous
UPS Dataline Suppression	1 line TEL/DSL (1 in / 1 out); 10/100Base T Ethernet
EMI / RFI AC Noise Suppression	Yes
<b>PHYSICAL</b>	
Primary Form Factor	Tower
Cooling Method	Fans
Installation Form Factors Supported with Included Accessories	Tower
Primary UPS Depth (mm)	495
Primary UPS Height (mm)	259
Primary UPS Width (mm)	229
Shipping Dimensions (hwd / in.)	14.70 x 23.30 x 12.70
Shipping Dimensions (hwd / cm)	37.34 x 59.18 x 32.26
Shipping Weight (lbs.)	55.00
Shipping Weight (kg)	24.95
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	25.91 x 22.86 x 49.53
UPS Power Module Dimensions (hwd, in.)	10.2 x 9 x 19.5
UPS Power Module Weight (kg)	22.36
UPS Power Module Weight (lbs.)	49.3
Unit Weight (lbs.)	49.3000

Unit Weight (kg)	22.36
<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	0 to 95%, non-condensing
AC Mode BTU / Hr. (Full Load)	612
AC Economy Mode BTU / Hr. (Full Load)	127
Battery Mode BTU / Hr. (Full Load)	667
AC Mode Efficiency Rating (100% Load)	87%
AC Economy Mode Efficiency Rating (100% Load)	97%
Audible Noise	< 45 dB at front side 1m
<b>COMMUNICATIONS</b>	
Network Management Cards	SNMPWEBCARD; &nbsp;<a class="productLink" href="//tripplite.eaton.com/Web-Management-Accessory-Card-SmartPro-SmartOnline-UPS-Systems~TLNETCARD">TLNETCARD</a>&nbsp;; &nbsp;<a class="productLink" href="//tripplite.eaton.com/Web-Management-Accessory-Card~WEBCARDLX">WEBCARDLX</a>&nbsp;; &nbsp;<a class="productLink" href="//tripplite.eaton.com/MODBUS-Management-Accessory-Card-UPS-Remote-Monitoring-Control~MODBUSCARD">MODBUSCARD</a>&nbsp;; &nbsp;<a class="productLink" href="//tripplite.eaton.com/Programmable-Relay-I-O-Card~RELAYIOCARD">RELAYIOCARD</a>&nbsp;;
Network Monitoring Port Description	Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications; Economy-mode setting option is available using PowerAlert software and DB9 Serial cable connection OR via select Network Management Card options
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 and DB9 cabling included
WatchDog Compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications
Network Management Card Description	Network management card optional
Communications Interface	Contact closure; DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface; USB (HID enabled)
<b>LINE / BATTERY TRANSFER</b>	
Transfer Time	No transfer time (0 ms.) in online, double-conversion mode
Low Voltage Transfer to Battery Power (Setpoint)	80V (100% load), 65V ( <70% load)
High Voltage Transfer to Battery Power (Setpoint)	150
<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 WEBCARDLX); Automatic inverter bypass; Hot swappable batteries; Remote management; 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
<b>APPLICATIONS</b>	
UPS Applications	Mission Critical Applications
<b>STANDARDS &amp; COMPLIANCE</b>	
Product Certifications	CSA (Canada); NOM (Mexico); UL 1778
Product Compliance	RoHS; FCC Part 15 Class A (USA)
<b>WARRANTY &amp; SUPPORT</b>	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000&nbsp;<a class="insuranceLink" href="//tripplite.eaton.com/support/insurance-policy">Ultimate Lifetime Insurance</a>&nbsp;