

# 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

#### **Highlights**

- 1500VA / 1.5kVA / 1200 watt on-line double-conversion tower UPS
- 110/120V +/-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

### **Package Includes**

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

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
- 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), BP48V60RT-3U (multi-pack compatible) and BP48V27-2US (multi-pack compatible) 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 www.tripplite.com/poweralert
- 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**

ОИТРИТ	
Output Volt Amp Capacity (VA)	1500
Output kVA Capacity (kVA)	1.5
Output Watt Capacity (Watts)	1200
Output kW 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
Nominal Output Voltage(s) Supported	100V; 110V; 120V
Nominal Voltage Details	120V default
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%
Output Receptacles	(6) 5-15R





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	
INPUT		
Rated input current (Maximum Load)	12A (120V), 14A (110V), 15.4A (100V)	
Nominal Input Voltage(s) Supported	100V AC; 110V AC; 120V AC	
UPS Input Connection Type	5-15P	
Input Circuit Breakers	20A	
UPS Input Cord Length (ft.)	10	
UPS Input Cord Length (m)	3.0	
Recommended Electrical Service	15A 120V	
Input Phase	Single-Phase	
BATTERY		
Full Load Runtime (min.)	4.5 min. (1200w)	
Half Load Runtime (min.)	14 min. (600w)	
Expandable Battery Runtime	Extended runtime supported via optional external battery packs	
External Battery Pack Compatibility	BP48V24-2U(limit 1); BP48V60RT-3U(multi-pack compatible); BP48V27-2US(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)	
Internal UPS Replacement Battery Cartridge	RBC48-SUTWR	
Battery Access	Battery access door	
Battery Replacement Description	Hot-swappable, user replaceable batteries	
Expandable Runtime	Yes	
VOLTAGE REGULATION		
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)	
USER INTERFACE, ALERTS & CONTROLS		
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	
LED Indicators	and fault status information - includes 4-LED meter display for load and battery charge level	
SURGE / NOISE SUPPRESSION		
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	
PHYSICAL		
Primary Form Factor	Tower	
UPS Power Module Dimensions (hwd, in.)	10.2 x 9 x 19.5	
UPS Power Module Dimensions (hwd, cm)	25.91 x 22.86 x 49.53	
UPS Power Module Weight (lbs.)	49.3	
UPS Power Module Weight (kg)	22.36	
UPS Shipping Dimensions (hwd / in.)	15.2 x 13 x 24	
UPS Shipping Dimensions (hwd / cm)	38.61 x 33.02 x 60.96	
Shipping Weight (lbs.)	56	
Shipping Weight (kg)	25.4	
Cooling Method	Fans	
UPS Housing Material	Steel	
Primary UPS Height (mm)	259	
Primary UPS Width (mm)	229	
Primary UPS Depth (mm)	495	
Shipping Height (mm)	386	
Shipping Width (mm)	330	
Shipping Depth (mm)	610	
ENVIRONMENTAL		
Operating Temperature Range	+32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius	
Storage Temperature Range	+5 to +122 degrees Fahrenheit / -15 to +50 degrees Celsius	
Relative Humidity	0 to 95%, non-condensing	
AC Mode BTU / Hr. (Full Load)	612	
AC Economy Mode BTU / Hr. (Full Load)	127	
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Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 Ultimate Lifetime Insurance	
Product Warranty Period (Worldwide)	2-year limited warranty	
WARRANTY		
UPS Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Tested to NOM (Mexico); Meets FCC Part 15 Category A (EMI)	
CERTIFICATIONS		
Green Energy-Saving Features	High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy mode operation	
High Availability UPS Features	Automatic inverter bypass; Hot swappable batteries	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported	
SPECIAL FEATURES		
High Voltage Transfer to Battery Power (Setpoint)	150	
Low Voltage Transfer to Battery Power (Setpoint)	80V (100% load), 65V ( <70% load)	
Transfer Time	No transfer time (0 ms.) in online, double-conversion mode	
LINE / BATTERY TRANSFER		
WatchDog Compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications	
Communications Cable	USB and DB9 cabling included	
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert Local software at http://www.tripplite.com/poweralert	
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	
Network Management Cards	SNMPWEBCARD; TLNETCARD; WEBCARDLX; MODBUSCARD; RELAYIOCARD	
Communications Interface	USB (HID enabled); DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface	
COMMUNICATIONS		
Audible Noise	< 45 dB at front side 1m	
AC Economy Mode Efficiency Rating (100% Load)	97%	
AC Mode Efficiency Rating (100% Load)	87%	
Battery Mode BTU / Hr. (Full Load)	667	

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