

Tripp Lite 1111 W. 35th Street Chicago, IL 60609 USA Telephone: 773.869.1234 www.tripplite.com

# SmartOnline 1.5kVA On-Line Double-Conversion UPS, Tower, Interactive LCD display, 100/110/120/127V NEMA 5-15R outlets

# MODEL NUMBER: SU1500XLCD









# Description

Do you need to protect small- to medium-size servers, networking equipment and telecom systems against data loss, downtime and equipment damage due to power outages, voltage fluctuations and transient surges? Tripp Lite's SU1500XLCD SmartOnline® Tower UPS System is the solution! Featuring a 1500VA/1350W capacity and true on-line operation with pure sine wave output and zero transfer time to battery, it provides the highest level of power protection for mission-critical equipment. The SU1500XLCD's large internal battery set supports connected equipment during blackouts, and runtime is expandable with optional external battery packs BP48V24-2U (limit 1), BP48V60RT-3U (multi-pack compatible) and BP48V27-2US (multi-pack compatible), sold

separately. The SU1500XLCD has 6 5-15R outlets, including 2 load banks of 3 outlets each that are individually controllable to reboot select equipment on demand or maximize battery runtime for mission-critical equipment. USB and DB9 communication ports support messaging of detailed UPS operational parameters and line power status. Included PowerAlert power management software supports an unlimited number of network UPS systems. The SU1500XLCD also accepts an optional SNMPWEBCARD accessory that enables the UPS to operate as a managed device on the network. It comes backed by a 2-year warranty and \$250,000 of Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only).

# Features

# Ideal for Protection of Mission-Critical Equipment

The SU1500XLCD provides true on-line operation, reliable battery backup and comprehensive power management capability in a compact tower form factor. Featuring a 1500VA/1350W capacity, 6 5-15R outlets, a 10-ft. cord with standard 5-15P plug, USB/DB9 ports and a slot for an optional SNMPWEBCARD, the SU1500XLCD offers a complete power protection solution for small- to medium-size servers, storage devices, telecom systems and other mission-critical equipment.

# True On-Line Operation with Pure Sine Wave Output and Zero Transfer Time

The SU1500XLCD provides the highest level of protection available for mission-critical equipment. It actively converts raw incoming AC power to DC, then re-converts it back to regulated, filtered AC output with a pure sine wave, completely isolating connected components from all power problems. Zero transfer time between AC and battery operation maintains continuous output and further protects connected equipment from the disruptive effects of blackouts and

# Highlights

- 1500VA / 1.5kVA / 1350 watt on-line double-conversion tower UPS
- 100/110/120/127V 50/60Hz output, 97% efficiency economy mode option
- Interactive LCD with 10 selectable screens of UPS and site power data
- USB, RS232 & EPO ports, SNMPWEBCARD option
- Expandable runtime, Hot-swappable batteries
- 2 independently switchable load banks
- NEMA 5-15P input; 6 5-15R outlets

# **Package Includes**

- SU1500XLCD SmartOnline® Tower UPS System
- PowerAlert Software CD and Cabling
- Emergency Power Off (EPO) Cabling
- Owner's Manual



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severe low-voltage conditions. Sine wave output guarantees compatibility with all equipment types.

#### Individually Controllable Outlets

The SU1500XLCD includes 2 load banks of 3 outlets each that are individually controllable via a software interface for remote reboot of locked-up equipment or load shedding to maximize battery backup time for mission-critical equipment.

#### Reliable, Expandable Battery Backup

UPS 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 SU1500XLCD features a large internal battery set that provides 14 minutes of battery support for a half load (675 watts) and 4.5 minutes for a full load (1350 watts). During normal operation, incoming utility power keeps the UPS battery fully charged so that backup power will always be available if needed. For mission-critical applications demanding continuous uptime, the fully scalable SU1500XLCD can provide expandable runtime with optional external battery packs BP48V24-2U (limit 1), BP48V60RT-3U (multi-pack compatible) and BP48V27-2US (multi-pack compatible), sold separately.

#### High Power Factor and Highly Efficient Operation Reduces BTU Output

The SU1500XLCD features a high 0.9 power factor and an optional, highly efficient economy mode setting that can significantly reduce a facility's energy costs. In economy mode, the UPS operates with 97% efficiency, minimizing heat output, reducing cooling requirements and consuming less electricity.

#### AC Line and Tel/Ethernet Surge Suppression

A sudden power surge or spike can damage or destroy electronic components and wipe out irreplaceable data. The SU1500XLCD features a 570-joule surge suppression rating to protect connected components and data from the harmful effects of power surges. One set of tel/Ethernet (RJ45) jacks provides surge protection for a standard phone or network connection (cable not included).

#### EMI/RFI Line Noise Filtering

Various electrical and radio sources can cause disruptive interference on the AC line. This line noise is a common cause of incremental hardware damage, data corruption and audio/video performance problems. The SU1500XLCD incorporates technology that filters out disruptive line noise, preventing it from affecting your equipment.

#### LCD Screen and Audible Alarm

The SU1500XLCD features a front-panel LCD screen that enables IT personnel to monitor line power, on-line mode, bypass mode, on-battery, overload, battery low, replace battery and fault status information. It is supplemented by an audible alarm that signals UPS startup, power failure, low battery, overload, UPS fault and remote shutdown conditions.

#### USB/DB9 Ports, SNMP Capability and Included PowerAlert Software

The SU1500XLCD features an HID-enabled USB port and a DB9 port (cables included). Used with Tripp Lite's included PowerAlert software, these communication ports provide comprehensive network power monitoring and control. Capabilities include UPS and line power status messaging (on battery, low-battery, power restored, AC line voltage, DC battery voltage and remaining battery capacity), timed inverter shutoff after unattended shutdown, and UPS output power control for delayed or immediate reboot of connected devices. The SU1500XLCD also accepts an optional SNMPWEBCARD accessory that enables the UPS to operate as a managed device on the network.

### **Emergency Power Off (EPO) Capability**

The SU1500XLCD features an EPO interface port that supports emergency shutoff in large facilities (cable included).

#### Peace of Mind

The SU1500XLCD comes with \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only) for connected equipment and a 2-year warranty.



# **Specifications**

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OUTPUT		
Output Capacity Details	ON LINE MODE: Maximum output capacity ratings are reduced for some nominal voltage settings (127/120V 1350 watts, 115V 1215 watts, 110V 1148 watts and 100V 1080 watts). FREQUENCY REGULATION / CONVERSION MODE: Maximum output ratings are reduced in frequency regulation / conversion mode (127/120V 945 watts, 115V 851 watts, 110V 804 watts, 100V 756 watts).	
Output Volt Amp Capacity (VA)	1500	
Output kVA Capacity (kVA)	1.5	
Output Watt Capacity (Watts)	1350	
Output kW Capacity (kW)	1.35	
Power Factor	0.9	
Crest Factor	3:1	
Nominal Output Voltage(s) Supported	100V; 110V; 120V; 127V	
Nominal Voltage Details	120V default	
Frequency Compatibility	50 / 60 Hz; Supports 50 to 60 Hz and 60 to 50 Hz conversion	
Frequency Compatibility Details	ON LINE MODE: Output frequency is automatically configured to match nominal input frequency on startup; Output matches input frequency when +/-5Hz of nominal; Output is regulated to +/-0.05Hz when input frequency exceeds +/-5Hz of nominal. UPS switches to battery mode when input frequency is below 40Hz or above 70Hz. FREQUENCY REGULATION / CONVERSION MODE: Output is regulated to +/-0.05Hz of selected output frequency when input is 40 to 70Hz; UPS switches to battery mode when input frequency is below 40Hz or above 70Hz. BATTERY MODE: Output is regulated to +/-0.05Hz of selected to +/-0.05Hz.	
Output Voltage Regulation (Line Mode)	+/- 2%	
Output Voltage Regulation (Economy Line Mode)	+/- 10%	
Output Voltage Regulation (Battery Mode)	+/- 3%	
UPS Output Receptacles	6 5-15R outlet(s)	
Load Management Receptacles	Two switchable three-outlet load banks	
Output AC Waveform (AC Mode)	Pure Sine wave	
Output AC Waveform (Battery Mode)	Pure Sine wave	
INPUT		
Rated input current (Maximum Load)	12A	
Nominal Input Voltage(s) Supported	100V AC; 110V AC; 120V AC; 127V AC	
Nominal Input Voltage Description	120V factory default	
UPS Input Connection Type	5-15P	
Input Circuit Breakers	15A	



UPS Input Cord Length (ft.)	10
UPS Input Cord Length (m)	3
Recommended Electrical Service	15A 120V
Input Phase	Single-Phase
BATTERY	
Full Load Runtime (min.)	4.5 min. (1350w)
Half Load Runtime (min.)	14 min. (675w)
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)
Expandable Runtime Description	External battery configurations require the use of Tripp Lite's External Battery Configuration Software, see manual for details
DC System Voltage (VDC)	48
Battery Recharge Rate (Included Batteries)	Less than 3 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
VOLTAGE REGULATION	
Voltage Regulation Description	
voltage regulation Description	Online, double-conversion power conditioning
Overvoltage Correction	Online, double-conversion power conditioning         2% output voltage regulation during overvoltages to 150
Overvoltage Correction	2% output voltage regulation during overvoltages to 150
Overvoltage Correction Undervoltage Correction	2% output voltage regulation during overvoltages to 150
Overvoltage Correction Undervoltage Correction LEDS ALARMS & SWITCHES	2% output voltage regulation during overvoltages to 150         2% output voltage regulation during undervoltages to 55V (33% load), 70V (70% load), 100V (100% load)         Front panel LCD information and configuration screen offers detailed UPS and site power status and operating data, plus configuration of voltage, frequency, operating mode, alarm function and a variety of additional options
Overvoltage Correction Undervoltage Correction LEDS ALARMS & SWITCHES Front Panel LCD Display	2% output voltage regulation during overvoltages to 150         2% output voltage regulation during undervoltages to 55V (33% load), 70V (70% load), 100V (100% load)         Front panel LCD information and configuration screen offers detailed UPS and site power status and operating data, plus configuration of voltage, frequency, operating mode, alarm function and a variety of additional options
Overvoltage Correction Undervoltage Correction LEDS ALARMS & SWITCHES Front Panel LCD Display Audible Alarm	2% output voltage regulation during overvoltages to 150         2% output voltage regulation during undervoltages to 55V (33% load), 70V (70% load), 100V (100% load)         Front panel LCD information and configuration screen offers detailed UPS and site power status and operating data, plus configuration of voltage, frequency, operating mode, alarm function and a variety of additional options         Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions         Power-fail alarm can be temporarily silenced using alarm-cancel switch; silent mode alarm configuration option
Overvoltage Correction Undervoltage Correction LEDS ALARMS & SWITCHES Front Panel LCD Display Audible Alarm Alarm Cancel Operation	2% output voltage regulation during overvoltages to 150         2% output voltage regulation during undervoltages to 55V (33% load), 70V (70% load), 100V (100% load)         Front panel LCD information and configuration screen offers detailed UPS and site power status and operating data, plus configuration of voltage, frequency, operating mode, alarm function and a variety of additional options         Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditional available
Overvoltage Correction Undervoltage Correction LEDS ALARMS & SWITCHES Front Panel LCD Display Audible Alarm Alarm Cancel Operation Switches	2% output voltage regulation during overvoltages to 150         2% output voltage regulation during undervoltages to 55V (33% load), 70V (70% load), 100V (100% load)         Front panel LCD information and configuration screen offers detailed UPS and site power status and operating data, plus configuration of voltage, frequency, operating mode, alarm function and a variety of additional options         Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown condition         Power-fail alarm can be temporarily silenced using alarm-cancel switch; silent mode alarm configuration option
Overvoltage Correction         Undervoltage Correction         LEDS ALARMS & SWITCHES         Front Panel LCD Display         Audible Alarm         Alarm Cancel Operation         Switches         SURGE / NOISE SUPPRESSION	2% output voltage regulation during overvoltages to 150         2% output voltage regulation during undervoltages to 55V (33% load), 70V (70% load), 100V (100% load)         Front panel LCD information and configuration screen offers detailed UPS and site power status and operating data, plus configuration of voltage, frequency, operating mode, alarm function and a variety of additional options         Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown condition         Power-fail alarm can be temporarily silenced using alarm-cancel switch; silent mode alarm configuration option available         2 switches control off/on power status and alarm-cancel/self-test operation
Overvoltage Correction         Undervoltage Correction         LEDS ALARMS & SWITCHES         Front Panel LCD Display         Audible Alarm         Alarm Cancel Operation         Switches         SURGE / NOISE SUPPRESSION         UPS AC Suppression Joule Rating         UPS AC Suppression Response	2% output voltage regulation during overvoltages to 150         2% output voltage regulation during undervoltages to 55V (33% load), 70V (70% load), 100V (100% load)         Front panel LCD information and configuration screen offers detailed UPS and site power status and operating data, plus configuration of voltage, frequency, operating mode, alarm function and a variety of additional options         Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown condition         Power-fail alarm can be temporarily silenced using alarm-cancel switch; silent mode alarm configuration option available         2 switches control off/on power status and alarm-cancel/self-test operation



PHYSICAL		
Primary Form Factor	Tower	
UPS Power Module Dimensions (hwd, in.)	10.2 x 9 x 19.5	
UPS Power Module Dimensions (hwd, cm)	25.9 x 22.9 x 49.5	
UPS Power Module Weight (lbs.)	52.3	
UPS Power Module Weight (kg)	23.7	
UPS Shipping Dimensions (hwd / in.)	15.2 x 13 x 24	
UPS Shipping Dimensions (hwd / cm)	38.6 x 33 x 61	
Shipping Weight (lbs.)	56.2	
Shipping Weight (kg)	25.5	
Cooling Method	Fan	
UPS Housing Material	Steel	
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)	512	
AC Economy Mode BTU / Hr. (Full Load)	142	
Battery Mode BTU / Hr. (Full Load)	813	
AC Mode Efficiency Rating (100% Load)	90%	
AC Economy Mode Efficiency Rating (100% Load)	97%	
Audible Noise	< 50.5 dB at front side 1m	
COMMUNICATIONS		
Communications Interface	USB (HID enabled); DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface	
Network Monitoring Port Description	Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications	
PowerAlert Software	Included	
	USB and DB9 cabling included	
Communications Cable		



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Transfer Time	Zero transfer time (0 ms.) in online, double-conversion and frequency regulation / conversion modes
Low Voltage Transfer to Battery Power (Setpoint)	55V (33% load), 70V (70% load), 100V (100% load)
High Voltage Transfer to Battery Power (Setpoint)	150
SPECIAL FEATURES	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
High Availability UPS Features	Automatic inverter bypass; Hot swappable batteries
Green Energy-Saving Features	High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy mode operation
CERTIFICATIONS	
UPS Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Tested to NOM (Mexico); Meets FCC Part 15 Category A (EMI)
WARRANTY	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 Ultimate Lifetime Insurance

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