

# SmartOnline 1kVA On-Line Double-Conversion UPS, Tower, Interactive LCD display, 100/110/120/127V NEMA 5-15R outlets

MODEL NUMBER: SU1000XLCD











#### 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 SU1000XLCD SmartOnline® Tower UPS System is the solution! Featuring a 1000VA/900W 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 SU1000XLCD's large internal battery set supports connected equipment during blackouts, and runtime is expandable with optional external battery packs (Tripp

# **Highlights**

- 1000VA / 1kVA / 900 watt on-line double-conversion tower UPS
- 100/110/120/127V 50/60Hz output, high efficiency economy mode option
- Interactive LCD with 10 selectable screens of UPS and site power data
- Expandable runtime,
   Hot-swappable batteries
- USB, RS232 & EPO ports, SNMPWEBCARD option
- 2 independently switched load banks
- NEMA 5-15P input; 6 5-15R outlets

#### Package Includes

- SU1000XLCD SmartOnline®
   Tower UPS System
- PowerAlert Software CD and Cabling
- Emergency Power Off (EPO)
   Cabling
- Owner's Manual

Lite model BP24V15RT2U, BP24V28-2U or BP24V70-3U), sold separately. The SU1000XLCD has 6 5-15R outlets, including 2 single-outlet load banks 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 SU1000XLCD 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 SU1000XLCD provides true on-line operation, reliable battery backup and comprehensive power management capability in a compact tower form factor. Featuring a 1000VA/900W 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 SU1000XLCD 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 SU1000XLCD 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 severe low-voltage conditions. Sine wave output guarantees compatibility with all equipment types.



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## **Individually Controllable Outlets**

The SU1000XLCD includes 2 single-outlet load banks 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 SU1000XLCD features a large internal battery set that provides 12.8 minutes of battery support for a half load (450 watts) and 3.8 minutes for a full load (900 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 SU1000XLCD can provide expandable runtime with optional external battery packs (Tripp Lite model BP24V15RT2U, BP24V28-2U or BP24V70-3U), sold separately.

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

The SU1000XLCD 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 96% 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 SU1000XLCD 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 SU1000XLCD incorporates technology that filters out disruptive line noise, preventing it from affecting your equipment.

#### LCD Screen and Audible Alarm

The SU1000XLCD 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 SU1000XLCD 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 SU1000XLCD 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 SU1000XLCD features an EPO interface port that supports emergency shutoff in large facilities (cable included).

#### **Peace of Mind**

The SU1000XLCD comes with \$250,000 Ultimate Lifetime Insurance (U.S., Canada, and Puerto Rico only) for connected equipment and a 2-year warranty.



# **Specifications**

ОИТРИТ		
Output Capacity Details	ON LINE MODE: Maximum output capacity ratings are reduced for some nominal voltage settings (127/120/115/110V 900 watts, 100V 810 watts). FREQUENCY REGULATION / CONVERSION MODE: Maximum output ratings are reduced in frequency regulation / conversion mode (127/120/115/110V 630 watts / 100V 567 watts).	
Output Volt Amp Capacity (VA)	1000	
Output kVA Capacity (kVA)	1	
Output Watt Capacity (Watts)	900	
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 nominal.	
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 single-outlet 5-15R load banks	
Output AC Waveform (AC Mode)	Pure Sine wave	
Output AC Waveform (Battery Mode)	Pure Sine wave	
INPUT		
Rated input current (Maximum Load)	10A	
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.)	3.8 min. (900w)	
Half Load Runtime (min.)	12.8 min. (450w)	
Expandable Battery Runtime	Extended runtime supported via optional external battery packs	
External Battery Pack Compatibility	BP24V15RT2U (limit 1); BP24V28-2U (limit 1); BP24V70-3U (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)	24	
Battery Recharge Rate (Included Batteries)	Less than 3 hours from 10% to 90% (typical, full load discharge)	
Internal UPS Replacement Battery Cartridge	RBC24V-LCD	
Battery Access	Battery access door	
Battery Replacement Description	Hot-swappable, user replaceable batteries	
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 55V (33% load), 70V (70% load), 100V (100% load)	
LEDS ALARMS & SWITCHES		
Front Panel LCD Display	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	Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions	
Alarm Cancel Operation	Power-fail alarm can be temporarily silenced using alarm-cancel switch; silent mode alarm configuration option available	
Switches	2 switches control off/on power status and alarm-cancel/self-test operation	
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  UPS Power Module Dimensions (hwd, in.)  UPS Power Module Dimensions (hwd, cm)  UPS Shipping Dimensions (hwd / in.)	Tower  10 x 6.8 x 13.2  25.4 x 17.1 x 33.7  14.2 x 10 x 18.5  36.2 x 25.4 x 47	
(hwd, in.)  UPS Power Module Dimensions (hwd, cm)	25.4 x 17.1 x 33.7 14.2 x 10 x 18.5 36.2 x 25.4 x 47	
(hwd, cm)	14.2 x 10 x 18.5 36.2 x 25.4 x 47	
UPS Shipping Dimensions (hwd / in.)	36.2 x 25.4 x 47	
UPS Shipping Dimensions (hwd / cm)		
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)	341	
AC Economy Mode BTU / Hr. (Full Load)	231	
Battery Mode BTU / Hr. (Full Load)	585	
AC Mode Efficiency Rating (100% Load)	90%	
AC Economy Mode Efficiency Rating (100% Load)	96%	
Audible Noise	< 50 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	
Communications Cable	USB and DB9 cabling included	
WatchDog Compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications	
LINE / BATTERY TRANSFER		
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		



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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 B (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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