



## Model #: SU1000XLA

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



#### **Highlights**

- 1000VA / 1kVA online, double-conversion, extended-run tower UPS
- Zero transfer time, on-line, double-conversion and economy-mode operation supported
- Maintains sine-wave 120V +/-2% output during overvoltages to 138 and brownouts as low as 65V (50/60Hz auto-sensing)
- Simultaneous communications use via HID-compliant USB port, serial port, and SNMP/web card slot
- Fault tolerant auto-bypass mode, current monitoring and switched PDU control via 2 individually controllable load banks
- Input: NEMA 5-15P (120V 15A) / Output: 6 NEMA 5-15R (120V)
- 2 year product warranty / \$250,000 Ultimate Lifetime Insurance (USA, Puerto Rico & Canada only)

#### **Description**

Tripp Lite's Smart Online SU1000XLa 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 1kVA/800 watt 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. Highly efficient operation in optional economy mode setting, saving BTU heat output and energy costs. Includes 6 UPS supported outlets. 2 single-outlet load banks 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. Extended runtime available with optional BP24V15RT2U, BP24V28-2U or BP24V70-3U 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/Rebooting Software.

#### Package Includes

- SU1000XLa Online UPS System
- PowerAlert Software CD and cabling
- Owner's 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
- Zero transfer time, on-line, double-conversion and economy-mode operation supported
- Removes harmonic distortion, electrical impulses, frequency variations and other hard to solve power problems

- Accepts input voltages between 80 and 138 (65 to 138 at loads under 70%), regulating output to 120V AC +/-2%
- 1000VA/800 watt output capacity with 6 total outlets (6 NEMA5-15R)
- Two built-in individually switchable load banks 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 (2 banks of 1 outlet)
- Standard internal battery set provides 14 minutes runtime at half load and 4 minutes at full load
- Extended runtime available with optional BP24V15RT2U, BP24V28-2U or BP24V70-3U external battery packs
- Attractive all-black upright tower format
- Simultaneous communications use 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/Rebooting 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
- \$250,000 Ultimate Lifetime connected equipment insurance (USA & Canada only)
- 2 year manufacturer's product warranty

#### **Specifications**

OUTPUT				
Output Volt Amp Capacity (VA)	1000			
Output kVA capacity (kVA)	1			
Output Watt Capacity (watts)	800			
Output 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%			
Built-in UPS output receptacles	6 5-15R outlet(s)			
Built-in controllable switched load banks	Two switchable single-outlet 5-15R load banks			
Basic PDU options	PDU1215 (1U / 13 5-15R outlets); PDUNV (1U / 2 C19, 12 C13 outlets); PDU1415 (0U / 14 5-15R outlets); PDUV15 (0U / 12 5-15R outlets)			

Switched PDU options	PDUMH15ATNET (1U / 8 5-15R outlets)*; PDUMV15NET (0U / 16 5-15R outlets)				
External PDU redundancy options	*ATS switch options PDUMH15AT & PDUMH15ATNET support dual UPS and hot-swappable UPS configuration				
Output AC waveform (AC mode)	Sine wave				
Output AC waveform (battery mode)	Sine wave				
INPUT					
Rated input current (at maximum load)	8.6A				
Nominal Input Voltage(s) Supported	100V AC; 110V AC; 120V AC				
UPS input connection type	5-15P				
Input circuit breaker	15A				
UPS Input cord length (ft.)	10				
UPS Input cord length (m)	3				
Recommended Electrical Service	15A 120V				
BATTERY					
Full load runtime (minutes)	4.5 min. (800w)				
Half load runtime (minutes)	14 min. (400w)				
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)				
DC system voltage	24V DC				
Battery recharge rate (included batteries)	Less than 6 hours from 10% to 90%				
Replacement battery cartridge (internal UPS battery replacement)	RBC24-SUTWR				
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 138				
Undervoltage	2% output voltage regulation during undervoltages to 80				

Severe undervoltage correction	2% output voltage regulation during undervoltages to 65 (under 70% load only)				
LEDS ALARMS & SWITC	HES				
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				
Alarms	Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions				
Alarm cancel operation	Power2 switches control off power operation and on power status, alarm-cancel, self-test, cold start operationfa alarm can be silenced using alarm-cancel switch				
Switches	2 switches control off/on power status and alarm-cancel/self-test operation				
SURGE / NOISE SUPPRE	SSION				
UPS AC suppression joule rating	570				
UPS AC suppression response time	Instantaneous				
UPS Dataline suppression	1 line TEL / DSL or 10Base T Ethernet protection				
EMI / RFI AC noise suppression	Yes				
PHYSICAL					
Installation form factors supported with included accessories	Tower				
Primary form factor	Tower				
UPS / Power Module dimensions in primary form factor (height x width x depth / inches)	10 x 6.8 x 13.2				
UPS / Power Module dimensions in primary form factor (height x width x depth / cm)	25.4 x 17.1 x 33.7				
UPS / Power Module weight (lbs)	29.8				
UPS / Power Module weight (kg)	13.5				
UPS Shipping dimensions (height x width x depth / inches)	14.2 x 10 x 18.5				
UPS Shipping dimensions (height x width x depth / cm)	36.2 x 25.4 x 47				
Shipping weight (lbs)	35.3				
Shipping weight (kg)	16				
UPS housing material	Steel				
Cooling method	Fan				
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)	406.4		
AC economy mode BTU / hr. (full load)	173.6		
Battery mode BTU / hr. (full load)	406.4		
AC economy mode efficiency rating (100% load)	94%		
Audible Noise	< 45 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 TRANSF	FER		
Transfer time	No transfer time (0 ms.) in online, double-conversion mode		
Low voltage transfer to battery power (setpoint)	80V (100% load), 65V (		
High voltage transfer to battery power (setpoint)	138		
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 & high efficiency 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); Meets FCC Part 15 Category B (EMI); Meets FCC Part 68 / Industrie Canada (telecommunications); ROHS (Reduction of Hazardous Substances)		
WARRANTY			
Standard warranty period	2 years		
Connected equipment insurance (USA, Canada, Puerto Rico)	\$250,000 connected equipment insurance		

## **Related Items**

## **Optional Products**

Product Type	Related Model	Description	Qty.
Shutdown Cable Kits	AS400CABLE KIT	Power Management Tools - UPS Communication Cable Kit for System i / AS400 / iSeries Servers	-
External Battery Packs	BP24V15RT2U	BP24V15RT2U - External Battery Pack for UPS System	-
External Battery Packs	BP24V28-2U	BP24V28-2U - External Battery Pack for UPS System	-
External Battery Packs	BP24V70-3U	BP24V70-3U - External Battery Pack for UPS System	-
Surge Protectors	DCATV	Network Surge Suppressor - Essential protection for TV/VCR coaxial lines	-
Surge Protectors	DNET1	Network Surge Suppressor - Essential protection for data and communication lines	-
Surge Protectors	DTEL2	Network Surge Suppressor - Essential protection for data and communication lines	-
SNMP Accessories	ENVIROSENSE	Monitors temperature, humidity and contact-closure inputs. (Requires SNMPWEBCARD or switched PDU.)	-
Power Distribution	PDU1215	Basic PDU / Power Distribution Unit - Safe, reliable power distribution for critical networking equipment	-
Power Strips	PS7224	Tripp Lite Power Strip - Multiple outlets wherever you need them	-
SNMP Accessories	SNMPWEBCARD	For remote monitoring and control via SNMP, Web, or Telnet.	-
Extended Warranties	WEXT3-500-1500	3-Year Extended Warranty - For Smart Line-Interactive and Online Tower or Rack models, 1500VA or less	-
Extended Warranties	WEXT5-500-1500	5-Year Extended Warranty - For Smart Line-Interactive and Online Tower or Rack models, 1500VA or less	-

More information, including related products, owner's manuals, and additional technical specifications, can be found online at www.tripplite.com/en/products/model.cfm?txtModelID=3180.

© 2010 Tripp Lite. All Rights Reserved.