

## SmartOnline 120V 1000VA 900W Double-Conversion UPS - 6 Outlets, Extended Run, Card Slot, LCD, USB, DB9, 2U

MODEL NUMBER: SU1000RTXLCD2U



On-line double-conversion UPS provides pure sine wave AC output to server and network equipment in data centers and computer rooms.

### Features

#### Double-Conversion UPS Protects Equipment against Damage, Downtime and Data Loss

This 100/110/120/127V 50/60 Hz UPS system with IGBT technology maintains perfect output by converting AC input to DC, then reconverts UPS output to fully regulated sine wave AC with +/-2% voltage regulation in online and battery modes. Featuring a 900W capacity, high 0.9 power factor, 570 joules of surge suppression, true on-line operation with pure sine wave output and zero transfer to battery mode in on-line double-conversion mode, the SmartOnline® SU1000RTXLCD2U double-conversion UPS provides the highest level of AC power protection and battery backup for critical network closet, computer room and data center equipment.

#### Individually Controllable Load Banks Let You Access and Control Outlets Remotely

Two NEMA 5-15R outlets are split into two switchable single-outlet load banks, allowing you to reboot select components or shed loads remotely. In addition to those two outlets, this UPS provides four more 5-15R outlets for powering critical components.

#### Reliable, Expandable Battery Backup Keeps You Operational Through Power Outages

The field-replaceable, hot-swappable internal battery provides 14 minutes of support at half load (450W) and 4.8 minutes at full load (900W), keeping protected equipment operational through power failures. For mission-critical applications demanding scalable extended runtime, the UPS supports external battery packs, such as BP24V15RT2U (sold separately). The intelligent battery management system with temperature-compensated charging extends battery life.

#### ENERGY STAR-Certified Economy Mode Helps You Save Money and Protect the Environment

By meeting strict EPA efficiency guidelines, this ENERGY STAR-certified UPS system helps you save money and energy. A power-saving Economy mode setting option offers enhanced efficiency and reduced BTU output when utility power is already high quality.

#### Automatically Turns Back On After Power Is Restored

Battery-independent restart ensures automatic UPS power-up without user interaction after lengthy power outages, even when batteries are expired and require replacement.

### Highlights

- Offers network-grade protection against power failures and voltage fluctuations
- Zero transfer time between on-line and battery modes for uninterrupted operation
- Optional external battery packs provide additional runtime for applications requiring it
- Optional WEBCARDLX network interface required to use Auto Probe feature
- ENERGY STAR-certified to save electricity, lower costs, and protect the environment

### Applications

- Deliver perfectly regulated sine wave output to mission-critical equipment
- Protect connected components from dangerous surges, spikes and line noise
- Keep equipment operational through power failures
- Allow time to save data and safely shut down components in case of a prolonged blackout

### Package Includes

- SU1000RTXLCD2U SmartOnline Double-Conversion UPS
- USB cable
- RS-232 cable
- EPO cable
- 4-post rack-mounting hardware
- Owner's manual

### Intuitive Front-Panel Interface for Convenient UPS Operation and Monitoring

The front-panel LCD features nine selectable screens of UPS data (including load, voltage and battery data) and 16 screens of configuration and setup options. LEDs indicate line power availability, AC to DC conversion, battery mode operation, inverter mode, ECO mode operation, bypass mode operation and AC output status.

### Advanced Communications Ports Allow for Automatic Saves and Shutdowns

RS-232 and HID-compliant USB ports connect to a computer running free downloadable PowerAlert® software to enable safe unattended file saves and system shutdown in case of a prolonged power failure. An EPO port connects the UPS to a contact closure switch to enable emergency inverter shutdown. Cables are included.

### Optional WEBCARDLX Network Interface Offers 24/7 Access

The SU1000RTXLCD2U includes a slot for an optional Java-free HTML5-based WEBCARDLX (sold separately) that enables full remote access for site power and UPS status monitoring, configuration, control and email notifications via secure web browser, SNMP, telnet or SSH. It supports 10/100 Mbps auto-sensing for optimum communication with an Ethernet network. Automated alerts help prevent accidental overloads, power loss and downtime. WEBCARDLX 15.5.2 or later is required to use the Auto Probe feature, which can prevent costly service calls by automatically rebooting non-responsive network devices.

### Versatile Installation Options

Hardware is included for mounting the UPS system in 2U of space in an EIA-standard 19-inch 4-post rack. Use the optional 2POSTRMKITWM (sold separately) for 2-post rack mounting or the optional 2-9USTAND (sold separately) for mounting in an upright tower position. The 10-ft. (3.05 m) power cord with NEMA 5-15P plug connects to any compatible AC outlet.

## Specifications

OVERVIEW	
UPC Code	037332164261
UPS Type	On-Line
INPUT	
Input Phase	Single-Phase
Rated input current (Maximum Load)	8.6A
Nominal Input Voltage(s) Supported	100V AC; 110V AC; 115V 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)	3.1
Recommended Electrical Service	15A 120V
OUTPUT	
Output Capacity (VA)	1000
Output Capacity (kVA)	1

Output Capacity (Watts)	900
Output Capacity (kW)	0.9
Output Capacity Details	<p>ON LINE MODE: Maximum output capacity is reduced to 608 watts at 100V nominal; FREQUENCY / REGULATION CONVERSION MODE: Maximum output ratings are reduced in frequency regulation / conversion mode (127/120/115/110V 630 watts / 100V 567 watts).</p> <p>OVERLOAD CAPACITY: Supports inverter operation up to 105% load continuously, 125% load for 3 minutes; 150% load for 30 seconds and &gt;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)</p>
Power Factor	0.9
Crest Factor	3:1
Nominal Voltage Details	120V factory-default nominal voltage
Frequency Compatibility	50 / 60 Hz; Supports 50 to 60 Hz and 60 to 50 Hz conversion
Frequency Compatibility Details	<p>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.</p> <p>FREQUENCY REGULATION / CONVERSION MODE: Output is regulated to +/-0.05Hz of selected output frequency 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.</p>
Output Voltage Regulation (Line Mode)	+/- 2%
Output Voltage Regulation (Economy Line Mode)	+/- 10%
Output Voltage Regulation (Battery Mode)	+/- 3%
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
Nominal Output Voltage(s) Supported	100V; 110V; 115V; 120V; 127V
Output Receptacles	(6) 5-15R
Individually Controllable Load Banks	Yes
<b>BATTERY</b>	
Battery Type	Valve Regulated Lead Acid (VRLA)
Runtime Full Load (min.)	4.8 min. (900W)
Runtime Half Load (min.)	14 min. (450W)
Expandable Runtime	Yes
Expandable Runtime Description	Some external battery configurations require the use of Tripp Lite's External Battery Configuration Software, see manual for details

External Battery Pack Compatibility	&nbsp;<a class="productLink" href="//tripplite.eaton.com/External-24V-2U-Rack-Tower-Battery-Pack-for-select-Tripp-Lite-UPS-Systems-BP24V15RT2U">BP24V15RT2U</a>&nbsp; (limit 1); &nbsp;<a class="productLink" href="//tripplite.eaton.com/External-24V-2U-Rack-Tower-Battery-Pack-select-Tripp-Lite-UPS-Systems-BP24V28-2U">BP24V28-2U</a>&nbsp; (limit 1); &nbsp;<a class="productLink" href="//tripplite.eaton.com/External-24V-3U-Rack-Tower-Battery-Pack-select-Tripp-Lite-UPS-Systems-BP24V70-3U">BP24V70-3U</a>&nbsp; (multi-pack compatible); &nbsp;<a class="productLink" href="//tripplite.eaton.com/external-24v-2u-rack-mount-battery-pack-for-tripp-lite-ups-systems-SMART750-SU750-SU1000-SUINT1000-and-more-BP24V36-2US">BP24V36-2US</a>&nbsp; (multi-pack compatible)
DC System Voltage (VDC)	24
Battery Recharge Rate (Included Batteries)	Less than 3 hours recharge to 90% (typical, full load discharge)
Battery Access	Front panel battery access
Internal UPS Replacement Battery Cartridge	&nbsp;<a class="productLink" href="//tripplite.eaton.com/2U-UPS-Replacement-Battery-Cartridge-for-Select-Tripp-Lite-UPS-RBC24V-LCD">RBC24V-LCD</a>&nbsp;
Battery Replacement Description	Hot-swappable, user replaceable batteries
<b>VOLTAGE REGULATION</b>	
Voltage Regulation Description	Online, double-conversion power conditioning maintains 2% output voltage regulation during brownouts and overvoltages
Overvoltage Correction	Corrects overvoltages to 150V (0-100% load)
Undervoltage Correction	Corrects undervoltages to 100V at full load (90V at 100V nominal)
Severe Undervoltage Correction	Corrects brownouts to 70V (70% load) & 55V (33% load)
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	
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
Switches	2 switches control off/on power status and alarm-cancel operation; 2 additional scroll-down and scroll-up / select options enable LCD status viewing and configuration options
Alarm Cancel Operation	Power-fail alarm can be temporarily silenced using alarm-cancel switch; silent mode alarm configuration option available
Audible Alarm	Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions
LED Indicators	7 front panel LEDs indicate line power availability, AC to DC conversion, battery mode operation, inverter mode, eco mode operation, bypass mode operation and AC output status
<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	Rackmount
Rack Height	2U

Cooling Method	Fan
Included Mounting Accessory Description	Included 4POSTRAILKIT mounting bracket enables installation in 4 post racks from 20.5 to 36 inches (521 to 914mm)
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount
Installation Form Factors Supported with Optional Accessories	2 post rackmount (&nbsp;<a class="productLink" href="//tripplite.eaton.com/2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM">2POSTRMKITWM</a>&nbsp;); 2-4 post front rail rackmount (&nbsp;<a class="productLink" href="//tripplite.eaton.com/Heavy-Duty-2-post-Front-Mounting-Ear-Kit-UPSHDEARKIT">UPSHDEARKIT</a>&nbsp;); 4 post rackmount short-depth (&nbsp;<a class="productLink" href="//tripplite.eaton.com/4-Post-1U-Universal-Adjustable-Rack-Mount-Shelf-Kit-for-Wall-Mount-Racks~4POSTRAILKITWM">4POSTRAILKITWM</a>&nbsp;); Tower (&nbsp;<a class="productLink" href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2-9USTAND</a>&nbsp;); Wallmount (&nbsp;<a class="productLink" href="//tripplite.eaton.com/2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM">2POSTRMKITWM</a>&nbsp;);
Minimum Required Rack Depth (cm)	40.64
Minimum Required Rack Depth (inches)	16
Optional Mounting Accessory Notes	Optional &nbsp;<a class="productLink" href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2-9USTAND</a>&nbsp; enables upright tower UPS placement; &nbsp;<a class="productLink" href="//tripplite.eaton.com/2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM">2POSTRMKITWM</a>&nbsp; enables wall-mount and 2-post rackmount installation; &nbsp;<a class="productLink" href="//tripplite.eaton.com/4-Post-1U-Universal-Adjustable-Rack-Mount-Shelf-Kit-for-Wall-Mount-Racks~4POSTRAILKITWM">4POSTRAILKITWM</a>&nbsp; enables installation in 4-post short-depth racks from 14.5 to 23.5 inches (368 to 597mm); &nbsp;<a class="productLink" href="//tripplite.eaton.com/Heavy-Duty-2-post-Front-Mounting-Ear-Kit-UPSHDEARKIT">UPSHDEARKIT</a>&nbsp; enables installation in 2 or 4-post racks using front vertical rails only, without rear support
Primary UPS Depth (mm)	318
Primary UPS Height (mm)	89
Primary UPS Width (mm)	445
Shipping Dimensions (hwd / in.)	9.20 x 23.30 x 19.30
Shipping Dimensions (hwd / cm)	23.37 x 59.18 x 49.02
Shipping Weight (lbs.)	42.50
Shipping Weight (kg)	19.28
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	8.89 x 44.45 x 31.75
UPS Power Module Dimensions (hwd, in.)	3.5 x 17.5 x 12.5
UPS Power Module Weight (kg)	13.15
UPS Power Module Weight (lbs.)	29
Unit Dimensions (hwd / in.)	3.500 x 17.500 x 12.500
Unit Weight (lbs.)	29.000
Unit Weight (kg)	13.15
<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)	341
AC Economy Mode BTU / Hr. (Full Load)	231
Battery Mode BTU / Hr. (Full Load)	585
AC Economy Mode Efficiency Rating (100% Load)	93%
Audible Noise	45 dBA at 1m front side
Operating Elevation (m)	Up to 3000m
<b>COMMUNICATIONS</b>	
Network Management Cards	SNMPWEBCARD; <a href="//tripplite.eaton.com/Web-Management-Accessory-Card-SmartPro-SmartOnline-UPS-Systems-TLNETCARD">TLNETCARD</a> ; <a href="//tripplite.eaton.com/Web-Management-Accessory-Card-WEBCARDLX">WEBCARDLX</a> ; <a href="//tripplite.eaton.com/MODBUS-Management-Accessory-Card-UPS-Remote-Monitoring-Control-MODBUSCARD">MODBUSCARD</a> ; <a href="//tripplite.eaton.com/Programmable-Relay-I-O-Card-RELAYIOCARD">RELAYIOCARD</a>
Network Monitoring Port Description	Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications
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	Zero (0 milliseconds) in double-conversion mode; 4 milliseconds economy mode
Low Voltage Transfer to Battery Power (Setpoint)	100V at full load (90V full load at 100V nominal setting); 70V at 70% load; 55V at 33% 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

# TRIPP-LITE

by **EAT•N**

1000 Eaton Boulevard  
Cleveland, OH 44122  
United States

STANDARDS & COMPLIANCE	
Product Certifications	CSA (Canada); UL 1778
Product Compliance	RoHS; ENERGY STAR Qualified; FCC Part 15 Class B (USA)
WARRANTY & SUPPORT	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 <a class="insuranceLink" href="//tripplite.eaton.com/support/insurance-policy">Ultimate Lifetime Insurance</a>

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