SmartOnline 120V 1.5kVA 1.35kW Double-Conversion UPS, 2U Rack/Tower, Extended Run, WEBCARDLX Network Interface, LCD, USB, DB9

MODEL NUMBER: **SU1500RTXLCDN**

Highlights

- Zero transfer time suitable for advanced network applications
- 2% output voltage regulation in online and battery modes
- Expandable runtime with optional external battery packs
- Pre-installed WEBCARDLX network interface
- 14 min. runtime at half load; 4.2 min. at full load

Package Includes

- SU1500RTXLCDN SmartOnline 120V 1.5kVA 1.35kW On-Line Double-Conversion UPS
- Pre-installed WEBCARDLX network interface
- USB cable
- DB9 cable
- EPO cable
- Mounting hardware
- Owner's manual

Protects connected mission-critical equipment against damage, downtime and data loss due to blackouts, brownouts, power surges and line noise. Pre-installed WEBCARDLX network interface permits remote UPS management, including reboots.

Features

Protects Mission-Critical Rack-Mounted Equipment Provides fully regulated sine wave AC output for servers, network storage devices and telecom hardware+/-2% voltage regulation in online and battery modesSelectable 100/110/120/127V output voltage6 NEMA 5-15R outlets10-ft. (3.05 m) power cord with NEMA 5-15P input570-joule surge suppression rating

Reliable Battery Backup with Expandable Runtime Supports half load for 14 min. and full load for 4.2 min.Zero transfer time suitable for advanced network applicationsExpandable runtime with optional external battery packs, such as Tripp Lite's BP48V24-2UBattery independent restart ensures automatic UPS power-up after lengthy power outages, even with expired batteries

Pre-Installed WEBCARDLX Network Interface Allows full remote access for power monitoring, configuration, control and email notifications via secure web browser, SNMP, telnet or SSHOptional EnviroSense2 sensors (sold separately) enable site monitoring of temperature, humidity and contact-closure status

Switchable Numbered Load Banks Outlets are divided into 2 numbered load banks, each of which may be individually powered on and off remotely to reset or reboot connected equipment

Interactive LCD Screen Reports detailed status information, including load, voltage and battery levelsOffers advanced configuration and setup options, including output voltage and operating mode

EMI/RFI Line Noise Filtering Removes electromagnetic and radio frequency interference that can disrupt or damage equipment's performance

Audible Alarm Indicates startup/shutdown, power failure, low battery, overload and fault conditions

Communications PortsUSB and DB9 ports enable data-saving unattended shutdown when used with Tripp Lite's PowerAlert software (available via free download at www.tripplite.com/poweralert)EPO port supports emergency shutdown in large facilities

Versatile Installation Options Hardware included for 4-post mounting in 2U of EIA-standard 19 in. rackMounts on wall or 2-post rack with optional 2POSTRMKITWMMounts in upright tower position with optional 2-9USTAND

Specifications

OVERVIEW	
UPC Code	037332192813
UPS Type	On-Line

INPUT	
Rated input current (Maximum Load)	12A
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	20A
UPS Input Cord Length (ft.)	10
UPS Input Cord Length (m)	3.1
Recommended Electrical Service	15A 120V
Input Phase	Single-Phase

OUTPUT	
Output Volt Amp Capacity (VA)	1500
Output Capacity (kVA)	1.5
Output Watt Capacity (Watts)	1350
Output kW Capacity (kW)	1.35
Output Capacity Details	ON LINE MODE: Maximum output capacity ratings is reduced to 1215 watts at 115V nominal and 1080 watts at 100V nominal; FREQUENCY REGULATION / CONVERSION MODE: Maximum output ratings are reduced in frequency regulation / conversion mode (127/120V 945 watts / 115V 850 watts / 110V 804 watts / 100V 756 watts) 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	0.9
Crest Factor	3:1
Nominal Voltage Details	120V factory-default nominal voltage; Less than 3% THD for linear loads and less than 5% for non-linear computer loads
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 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.
Output Voltage Regulation (Line Mode)	+/- 2%
Output Voltage Regulation (Economy Line Mode)	+/- 10%
Output Voltage Regulation (Battery Mode)	+/- 3%
Load Management Receptacles	Two switchable three-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

BATTERY

Battery Type	Valve Regulated Lead Acid (VRLA)
Full Load Runtime (min.)	4.2 min. (1350w)
Half Load Runtime (min.)	14 min. (675w)
Expandable Battery Runtime	Extended runtime supported via optional external battery packs
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	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 3 hours recharge to 90%; Add 6 hours per BP48V27-2US (typical, full load discharge)
Battery Access	Front panel battery access
Internal UPS Replacement Battery Cartridge	RBC94-2U
Battery Replacement Description	Hot-swappable, user replaceable batteries

VOLTAGE REGULATION

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)

USER INTERFACE, ALERTS & CONTROLS

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

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	Rackmount
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 (2POSTRMKITWM); 2-4 post front rail rackmount (UPSHDEARKIT); 4 post rackmount short-depth (4POSTRAILKITWM); Tower (2-9USTAND); Wallmount (2POSTRMKITWM)
Minimum Required Rack Depth with External Battery Pack (cm)	65
Minimum Required Rack Depth with External Battery Pack (in.)	25.5
Minimum Required Rack Depth without External Battery Pack (cm)	55
Minimum Required Rack Depth without External Battery Pack (in.)	21.5

Optional Mounting Accessory Notes	Optional 2-9USTAND enables upright tower UPS placement; 2POSTRMKITWM enables wall-mount and 2-post rackmount installation; 4POSTRAILKITWM enables installation in 4-post short-depth racks from 14.5 to 23.5 inches (368 to 597mm); UPSHDEARKIT enables installation in 2 or 4-post racks using front vertical rails only, without rear support
Primary UPS Depth (mm)	470
Primary UPS Height (mm)	89
Primary UPS Width (mm)	445
Rack Height	2U
Shipping Dimensions (hwd / cm)	23.37 x 59.18 x 48.77
Shipping Dimensions (hwd / in.)	9.20 x 23.30 x 19.20
Shipping Weight (kg)	27.22
Shipping Weight (lbs.)	60.00
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	8.89 x 44.45 x 46.99
UPS Power Module Dimensions (hwd, in.)	3.5 x 17.5 x 18.5
UPS Power Module Weight (kg)	20.50
UPS Power Module Weight (lbs.)	45.2

ENVIRONMENTAL	
Operating Temperature Range	+32 to +104 degrees Fahrenheit / 0 to +40 degrees Celsius
Storage Temperature Range	+5 to +122 degrees Fahrenheit / -20 to +40 degrees Celsius with batteries; -13 to +131 Fahrenheit / -25 to +55 degrees Celsius without batteries
Relative Humidity	0 to 95%, non-condensing
AC Mode BTU / Hr. (Full Load)	455
AC Economy Mode BTU / Hr. (Full Load)	294
Battery Mode BTU / Hr. (Full Load)	559
AC Economy Mode Efficiency Rating (100% Load)	94%
Audible Noise	45 dBA at 1m front side
Operating Elevation (m)	Up to 3000m

COMMUNICATIONS	
Network Management Cards	WEBCARDLX
Network Monitoring Port Description	Includes pre-installed WEBCARDLX Network Management Card; 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 Local software at https://www.tripplite.com/poweralert
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 included
Communications Interface	Contact closure; DB9 Serial; EPO (emergency power off); Pre-installed network card; Slot for SNMP/Web interface; USB (HID enabled)

LINE / BATTERY TRANSFER	
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

FEATURES & SPECIFICATIONS	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
High Availability UPS Features	Auto Probe Monitoring and Reboot (included); Automatic inverter bypass; Expandable battery backup; Hot swappable batteries; On-Line/Double-Conversion; Remote management; Sine wave output; 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

STANDARDS & COMPLIANCE	
UPS Certifications	ENERGY STAR Qualified; Meets FCC Part 15 Category A (EMI); ROHS (Restriction of Hazardous Substances); Tested to CSA (Canada); Tested to UL1778 (USA)

WARRANTY	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	$250,000 Ultimate Lifetime Insurance