SmartPro 120V 2.2kVA 1.92kW Line-Interactive Sine Wave UPS, 2U Rack/Tower, Extended Run, Pre-Installed WEBCARDLX Network Interface, LCD Display, USB, DB9 Serial

MODEL NUMBER: SMART2200RMXLN

Highlights

- 2.2kVA / 2200VA / 1920W line interactive 2U rack / tower UPS; 0.9 power factor
- 120V nominal output during brownouts to 83V and overvoltages to 145V
- Interactive LCD provides UPS status information and advanced configuration options
- USB, RS232, EPO and pre-installed WEBCARDLX Network Interface
- Expandable runtime, Hot-swap batteries, 96% efficiency, Sine wave output
- NEMA 5-20P input; 4 NEMA 5-15/20R & 4 5-15R outlets
- To enable the Auto Probe feature, this product requires LX firmware update 15.5.2 or later to be installed

Package Includes

- SMART2200RMXLN UPS system
- Pre-installed WEBCARDLX network interface
- USB, Serial & EPO cabling
- 4-post installation kit
- Owner's manual

Description

Tripp Lite SmartPro Line Interactive UPS with enhanced LCD interface offers network-grade power protection for critical server, network and telecommunications equipment. Line Interactive Uninterruptible Power Supply (UPS) with built-in Auto-Voltage Regulation (AVR) actively corrects brownouts and overvoltages back to usable levels while maintaining a full battery charge in case of power failure. Tripp Lite's unique configuration excels in exceptionally poor-power environments with two separate levels of voltage boost to correct both slight undervoltages and severe brownout conditions. Interactive LCD interface reports UPS operating mode, detailed UPS and site-power data, plus enables a variety of UPS setup and configuration options. Super-fast switchover from line to battery power occurs within milliseconds to maintain operation of connected equipment without interruption or reboot. 96% line-mode efficiency offers reduced heat emissions and operating costs.

The Java-free HTML5-based WEBCARDLX interface 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. Optional EnviroSense2 modules (sold separately) provide a variety of environmental monitoring capabilities. Protocols supported include HTTP, HTTPS, SMTP, SNMPv1, SNMPv2, SNMPv3, telnet, SSH, FTP, DHCP and NTP.

HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X. Network communications ports enable detailed monitoring of equipment load levels, self-test data and utility power conditions. PowerAlert UPS monitoring software is available via free download. Switched output load banks enable scheduled and real-time remote reboot and load shedding of select outlets. Emergency Power Off (EPO) interface. LCD display panel easily rotates for viewing in rack-mount or tower configurations. Audible alarm with push-button momentary alarm-cancel and silent-mode configuration options. Programmable self-test. Field-replaceable, hot-swappable battery modules.

Features

- Tripp Lite SMART2200RMXLN line interactive 2U rack/tower UPS with 2200VA / 2.2kVA / 1920W capacity and extended runtime options

- Line interactive UPS with Automatic Voltage Regulation (AVR) corrects brownouts and overvoltages from 83 to 145V

- NEMA 5-20P input plug; 4 NEMA 5-15/20R and 4 5-15R output receptacles, Two independently switched output load banks

- Maintains uninterrupted operation of connected networking equipment during blackouts, surges, brownouts and overvoltages

- High 96% efficiency rating in line-power mode offers reduced power consumption and BTU emisssions

- Internal batteries offer 12 minutes at 50% load (960W) and 4.5 minutes at 100% load (1920W)

- Extended runtime is available with optional BP48V24-2U (limit 1), BP48V60RT-3U (multi-pack compatible) and BP48V27-2US (multi-pack compatible); Output is reduced to 1600 watts maximum with external battery packs

- External battery configurations require the use of Tripp Lite's External Battery Configuration Software (see manual)

- Hot-swappable, user-replaceable internal batteries and external battery packs can be replaced with no disruption to connected equipment

- Intelligent battery management system extends battery life

- Front panel LCD monitoring screen with MODE and ENTER buttons reports operating mode with 5-bar battery charge graphic, plus 7 selectable screens of detailed UPS and site power information

- LCD interface also supports a number of advanced user setup and operating preferences

- Ships with 4 post rackmount installation hardware; Optional 2POSTRMKITWM enables 2 post rackmount/wallmount installation; Optional 2-9USTAND enables tower placement

- Network interfaces support communications via built-in USB, DB9 serial / contact-closure and pre-installed WEBCARDLX network management card

- WEBCARDLX interface allows full remote access for power monitoring, configuration, control and email notifications via secure web browser, SNMP, Telnet, SSH, or Command Line

- Reduce service calls with Auto Probe Autonomous Device Management. The Auto Probe feature (Firmware 15.5.2 and greater) checks the connectivity status of any networked device and automatically takes one or more user-configured actions if the device fails to respond; actions include outlet reboot, set SNMP traps, SNMP OID sets, and even script execution when used in conjunction with the Tripp Lite PowerAlert Network Shutdown Agent (PANSA)

- Optional EnviroSense2 sensors (sold separately) enable site monitoring of temperature, humidity and contact-closure status

- HID-compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X

- USB 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)

- Built-in Emergency Power Off (EPO) interface with cable

Specifications

OVERVIEW	
UPC Code	037332177926
UPS Type	Line-Interactive

INPUT	
Rated input current (Maximum Load)	16A
Nominal Input Voltage(s) Supported	120V AC
UPS Input Connection Type	5-20P
UPS Input Cord Length (ft.)	10
UPS Input Cord Length (m)	3.1
Recommended Electrical Service	20A 120V

Input Phase	Single-Phase

OUTPUT	
Output Volt Amp Capacity (VA)	2200
Output Capacity (kVA)	2.2
Output Watt Capacity (Watts)	1920
Output kW Capacity (kW)	1.92
Output Capacity Details	Output is reduced to 1600 watts maximum when used with external battery packs
Power Factor	0.87
Nominal Voltage Details	120v nominal output in battery mode
Frequency Compatibility	60 Hz
Output Voltage Regulation (Line Mode)	-14%, +6%
Output Voltage Regulation (Battery Mode)	+/- 5%
Load Management Receptacles	Two switched single outlet load banks (1 5-15/20R & 1 5-15R)
Output AC Waveform (AC Mode)	Pure Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
Nominal Output Voltage(s) Supported	110V; 115V; 120V
Output Receptacles	(4) 5-15R; (4) 5-15/20R
Individually Controllable Load Banks	Yes

BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
Full Load Runtime (min.)	4.5 min. (1920w)
Half Load Runtime (min.)	12 min. (960w)
Expandable Battery Runtime	Extended runtime supported via optional external battery packs
Expandable Runtime	Yes
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)	4.5 hours maximum from 10% to 90% (typical, full load discharge)
Battery Access	Front panel battery access door
Internal UPS Replacement Battery Cartridge	RBC94-2U

Battery Replacement Description	Hot-swappable, user replaceable batteries

VOLTAGE REGULATION

Voltage Regulation Description	Automatic voltage regulation (AVR) maintains line power operation with an input voltage range of 83 to 145
Overvoltage Correction	Voltage reduction of 12% applies when input is between 127 and 145
Undervoltage Correction	Voltage boost of 12% applies when input voltage is between 96 and 108
Severe Undervoltage Correction	Voltage boost of 24% applies when input voltage is between 83 and 95

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, operating mode, alarm function and a variety of additional options (see manual for detailed LCD configuration and monitoring options)
Switches	3 pushbutton switches control OFF / ON power status, MODE selection and MUTE / ENTER control functions. LX Platform Interface: Recessed reset switch for interface reboot and factory reset
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	Network Link/Activity (Green): Flashes for network activity. Network Speed (Yellow): 10 Mbps (Flashing), 100 Mbps (On steady). LX Platform Interface Status: Normal Operation (Solid Green); Software Update (Alternating Green/Orange ~1/sec); Factory Reset (Alternating Green/Orange ~2/sec).

SURGE / NOISE SUPPRESSION

UPS AC Suppression Joule Rating	570
UPS AC Suppression Response Time	Instantaneous
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); 4 post rackmount short-depth (4POSTRAILKITWM); Tower (2-9USTAND); Wallmount (2POSTRMKITWM)
Minimum Required Rack Depth with External Battery Pack (cm)	67
Minimum Required Rack Depth with External Battery Pack (in.)	26.5

Minimum Required Rack Depth without External Battery Pack (cm)	62
Minimum Required Rack Depth without External Battery Pack (in.)	24.5
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)	494
Primary UPS Height (mm)	87
Primary UPS Width (mm)	440
Rack Height	2U
Shipping Dimensions (hwd / cm)	22.61 x 60.71 x 55.88
Shipping Dimensions (hwd / in.)	8.90 x 23.90 x 22.00
Shipping Weight (kg)	35.31
Shipping Weight (lbs.)	77.85
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	8.71 x 43.99 x 49.43
UPS Power Module Dimensions (hwd, in.)	3.43 x 17.32 x 19.46
UPS Power Module Weight (kg)	26.13
UPS Power Module Weight (lbs.)	57.6

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	5 to 95%, non-condensing
AC Mode BTU / Hr. (Full Load)	306
Battery Mode BTU / Hr. (Full Load)	1157
AC Mode Efficiency Rating (100% Load)	96%
Audible Noise	45 dBA maximum, front side 1m

COMMUNICATIONS

Network Management Cards	WEBCARDLX
Network Monitoring Port Description	Pre-installed WEBCARDLX network management card; Supports detailed monitoring of UPS and site power conditions

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 UPS Tools Compatibility	NUT compatible. See the full list of Tripp Lite NUT compatible UPS systems at http://www.networkupstools.org/stable-hcl.html?manufacturer=Tripp Lite
Network Management Card Description	Network management card included
Communications Interface	DB9 Serial; EPO (emergency power off); Pre-installed network card; Slot for SNMP/Web interface; USB (HID enabled)

LINE / BATTERY TRANSFER

Transfer Time	5 milliseconds (line to battery mode); 1 millisecond (battery to line mode)
Low Voltage Transfer to Battery Power (Setpoint)	83
High Voltage Transfer to Battery Power (Setpoint)	145

FEATURES & SPECIFICATIONS

Grounding Lug	Back panel grounding lug
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 Voltage Regulation (AVR); Expandable battery backup; Hot swappable batteries; Remote management; Sine wave output; Surge/noise protection
Green Energy-Saving Features	Greater than 95% efficiency - GREEN UPS; Individually controllable load banks

STANDARDS & COMPLIANCE

UPS Certifications	Meets FCC Part 15 Category A (EMI); Tested to CSA (Canada); Tested to NOM (Mexico); Tested to UL1778 (USA)
Certification Details	SAFETY STANDARD (U.S.) - UL1778:2014 (5th Ed) R10.17; SAFETY STANDARD (CANADA) - CAN/CSA-C22.2 No. 107.3-14 (3rd Ed) + GI1 / FCC/ICES COMPLIANT - CLASS A

WARRANTY

Product Warranty Period (Worldwide)	2-year warranty, 3 year with registration. Note: Registration is required for 3-year warranty.
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	$250,000 Ultimate Lifetime Insurance