

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**



Description

This 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 overvoltage's back to usable levels while maintaining a full battery charge in case of power failure. This unique configuration excels in exceptionally poor power environments with two separate levels of voltage boost to correct both slight under voltages 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-percent line-mode efficiency offers reduced heat emissions and operating costs. Network management interfaces support communications via USB port, DB9 serial port and pre-installed WEBCARDLX network management interface card. 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 port enables integration with built-in power management and auto shutdown features of Windows and macOS. 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

- SMART2200RMXLN line interactive 2U rack/tower UPS with 2200VA / 1.92kVA 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 5-15R and 4 NEMA 5-15/20R output receptacles, Two independently switchable output load banks

Highlights

- 2.2kVA / 2200VA / 1920W line interactive 2U rack/tower UPS, Sine Wave
- Extended runtime options up to 1600W, 0.9 Power Factor, 4 post mounting kit
- USB, RS232, EPO and pre-installed WEBCARDLX Network Interface
- 120V NEMA 5-20P input, 4 NEMA 5-15R & 4 NEMA 5-15/20R 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 with Pre-installed Network Management Card
- USB, Serial & EPO cabling
- 4 post rackmount installation kit
- Instruction manual

- 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 emissions
- 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) external battery packs
- External battery configurations require the use of 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 rack-mount installation hardware; Optional 2POSTRMKITWM enables 2-post rack-mount/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) of the LX Platform interface 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 PowerAlert Network Shutdown Agent (PANSA)
- Optional E2 sensors enable site monitoring of temperature, humidity and contact-closure status
- HID-compliant USB port enables integration with built-in power management and auto shutdown features of Windows and macOS
- USB & Serial ports enable data-saving unattended shutdown when used with PowerAlert software, available via FREE download from tripplite.eaton.com/products/power-alert
- Built-in Emergency Power Off (EPO) interface with cable

Specifications

OVERVIEW	
UPC Code	037332177926
UPS Type	Line-Interactive
INPUT	
Input Phase	Single-Phase
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

OUTPUT	
Output Capacity (VA)	2200
Output Capacity (kVA)	2.2
Output Capacity (Watts)	1920
Output 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)	+6%, -14%
Output Voltage Regulation (Battery Mode)	+/-5%
Load Management Receptacles	Two switchable single outlet load banks (1) 5-15R & (1) 5-15/20R
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)
Runtime Full Load (min.)	4.5 min. (1920W)
Runtime Half Load (min.)	12 min. (960W)
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)	Less than 5 hours from 10 to 90% (typical, full load discharge)
Battery Access	Front panel battery access door
Internal UPS Replacement Battery Cartridge	RBC58-2U
Battery Replacement Description	Hot-swappable, 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	Input voltages between 127 and 145 are reduced by 12%
Undervoltage Correction	Input voltages between 108 and 96 are boosted by 12%
Severe Undervoltage Correction	Input voltages between 83 and 95 are boosted by 24%
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
EMI / RFI AC Noise Suppression	Yes
AC Suppression Response Time	Instantaneous
PHYSICAL	
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 (2POSTRMKITWM); 4 post rackmount short-depth (4POSTRAILKITWM); Tower (2-9USTAND); Wallmount (2POSTRMKITWM);
Minimum Required Rack Depth (cm)	55.88
Minimum Required Rack Depth (inches)	22
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)	490
Primary UPS Height (mm)	88
Primary UPS Width (mm)	440
Shipping Dimensions (hwd / in.)	8.50 x 24.30 x 21.60
Shipping Dimensions (hwd / cm)	21.59 x 61.72 x 54.86
Shipping Weight (lbs.)	77.00
Shipping Weight (kg)	34.93
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	8.79 x 43.99 x 49.00
UPS Power Module Dimensions (hwd, in.)	3.46 x 17.32 x 19.29
UPS Power Module Weight (kg)	26.13
UPS Power Module Weight (lbs.)	57.6
Unit Dimensions (hwd / in.)	3.46 x 17.32 x 19.29
Unit Weight (lbs.)	57.600
Unit Weight (kg)	26.13
ENVIRONMENTAL	
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)	306
AC Mode Efficiency Rating (100% Load)	96%
Battery Mode Heat Dissipation (BTU/Hr) @ Full Load	1157
Audible Noise	45 dBA maximum, front side 1m

COMMUNICATIONS	
Network Management Cards	 WEBCARDLXE
Network Monitoring Port Description	Includes pre-installed WEBCARDLX Network Management Card interface. RJ45 Network port, Micro-USB Configuration/Console port, USB A port supports a variety of EnviroSense2 environmental and control modules. See Accessories>Management Hardware section for more information about these modules.
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert software at https://tripplite.eaton.com/products/power-alert
Communications Cable	Micro-USB, USB, DB9 and EPO cabling included
WatchDog Compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications
Network Monitoring Port	RJ45 Network port, Micro-USB Configuration/Console port, USB A port supports a variety of EnviroSense2 environmental and control modules. See Accessories>Management Hardware section for more information about these modules.
EPO Port	RJ11 interface jack with 4-meter cable included. Supports normally open and normally closed EPO systems
SNMP Compatibility	SNMP V1, V2c, V3
Network UPS Tools (NUT) Compatibility	NUT compatible. See a full list of NUT compatible Tripp Lite UPS systems at https://networkupstools.org/stable-hcl.html?manufacturer=Tripp%20Lite
Network Compatibility	100 Mbps (Fast Ethernet)
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 (AC to battery mode), 1 millisecond (Battery to AC mode)
Low Voltage Transfer to Battery Power (Setpoint)	83
High Voltage Transfer to Battery Power (Setpoint)	145
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 Voltage Regulation (AVR); Hot swappable batteries; Remote management; Surge/noise protection
Green Energy-Saving Features	Greater than 95% efficiency - GREEN UPS; Individually controllable load banks; Schedulable daily hours of economy mode operation
Grounding Details	Back panel grounding lug
APPLICATIONS	
UPS Applications	Large Network
STANDARDS & COMPLIANCE	
Product Certifications	CSA (Canada); NOM (Mexico); UL 1778

Product Compliance	RoHS; FCC Part 15 Class A (USA)
WARRANTY & SUPPORT	
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