

## SmartPro 120V 2.2kVA 1.9kW Line-Interactive Sine Wave UPS, 4U Short Depth, Extended Run, Network Card Options, USB, DB9

MODEL NUMBER: **SMART2200CRMXL**



### Description

Tripp Lite's SmartPro Compact Rackmount Uninterruptible Power Supply (UPS) offers line interactive voltage regulation, network grade surge suppression and long lasting battery support for critical network hardware during blackouts and extended power failures. Special reduced-depth housing, larger internal batteries, higher rated wattage and included 2 post rackmount installation hardware makes these systems ideal for network and telecom wiring closets and other limited-space installations. 97% line power mode efficiency saves operating costs over less efficient UPS types. Runtime is expandable with optional BP48V24-2U (limit 1), BP48V48RT4U (multi-pack compatible) and BP48V27-2US (multi-pack compatible) reduced-depth external battery packs.

SMART2200CRMXL 4U rackmount 2200VA/1900 watt UPS offers battery-derived sine wave AC output during power failures and extreme voltage variations. Line interactive Automatic Voltage Regulation (AVR) provides two levels of voltage boost during brownouts and one level of voltage cut during overvoltage conditions to maintain regulated 120V nominal output over an input range of 83-145V. Includes NEMA 5-20P input plug, NEMA 5-15R and 5-15/20R output receptacles. Network management interfaces support simultaneous communications via USB port, DB9 serial port and optional network management accessory card slot. HID-compliant USB interface enables full integration with built-in power management and auto shutdown features of Windows and Mac OS X. Supports detailed monitoring of equipment load levels, self-test data and utility power conditions via all 3 network interfaces at once. PowerAlert monitoring software is available via free download. Emergency Power Off (EPO) interface. Integrated 3-bank programmable PDU switching supports load shedding and remote-reboot of up to 3 individual connected devices. 3-stage metered current monitoring and battery charge status LEDs. Utility power and voltage regulation LEDs. Audible alarm. Self-test. 2-post rackmount accessories included; 2-9U STAND tower stands. Field-replaceable, hot-swappable internal batteries and external battery packs. Attractive all-black color scheme.

### Features

- Tripp Lite's SmartPro Compact Rackmount Uninterruptible Power Supply (UPS) offers line interactive voltage regulation, network grade surge suppression and long lasting battery support for critical network hardware during blackouts and extended power failures
- Special reduced-depth housing, larger internal batteries, higher rated wattage and included 2 post rackmount installation hardware makes these systems ideal for network and telecom wiring closets and other limited-space installations
- Runtime is expandable with optional BP48V24-2U (limit 1), BP48V48RT4U (multi-pack compatible) and BP48V27-2US (multi-pack compatible) reduced-depth external battery packs

### Highlights

- 2.2kVA / 2200VA / 1900W line interactive 4U reduced-depth rack/tower UPS, Sine Wave
- Reduced depth housing is ideal for 2 post rackmount installations
- 97% line-mode efficiency, 3 switched load banks, 2-post mounting kit
- USB, RS232 & EPO and slot for network management card options
- 120V NEMA 5-20P input, 4 NEMA 5-15R & 4 NEMA 5-15/20R outlets
- To use the Auto Probe feature, this product requires a WEBCARDLX network interface (sold separately) running LX firmware update 15.5.2 or later

### Package Includes

- SmartPro Compact 4U Rackmount UPS system
- 2 post rackmount installation brackets
- USB and Serial Cabling
- Owner's manual

- Some external battery configurations require the use of Tripp Lite's External Battery Configurator (see manual)
- Intelligent battery management system extends battery life
- SMART2200CRMXL 4U rackmount 2200VA/1900 watt UPS offers battery-derived sine wave AC output during power failures and extreme voltage variations
- Line interactive Automatic Voltage Regulation (AVR) provides two levels of voltage boost during brownouts and one level of voltage cut during overvoltage conditions to maintain regulated 120V nominal output over an input range of 83-145V
- Includes NEMA 5-20P input plug, NEMA 5-15R and 5-15/20R output receptacles
- Network management interfaces support simultaneous communications via USB port, DB9 serial port and optional network management accessory card slot
- Compatible with Tripp Lite UPS management card options WEBCARDLX, SNMPWEBCARD and RELAYIOCARD
- HID-compliant USB interface enables full integration with built-in power management and auto shutdown features of Windows and Mac OS X
- 97% efficiency in line power mode offers substantially lower operating costs than lower efficiency UPS types
- Supports detailed monitoring of equipment load levels, self-test data and utility power conditions via all 3 network interfaces at once
- USB & Serial ports enable data-saving unattended shutdown when used with Tripp Lite's PowerAlert software, available via FREE download from [tripplite.eaton.com/products/power-alert](http://tripplite.eaton.com/products/power-alert)
- Emergency Power Off (EPO) interface
- Integrated 3-bank programmable PDU switching supports load shedding and remote-reboot of up to 3 individual connected devices
- 3-stage metered current monitoring and battery charge status LEDs; Utility power and voltage regulation LEDs; Audible alarm; Self-test
- 2-post rackmount accessories included; 2-9U STAND tower stands available
- Field-replaceable, hot-swappable internal batteries and external battery packs
- Attractive all-black color scheme

## Specifications

OVERVIEW	
UPC Code	037332142368
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
Input Circuit Breakers	20A
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)	1900
Output Capacity (kW)	1.9
Power Factor	0.86
Nominal Voltage Details	120v nominal output in battery mode
Frequency Compatibility	60 Hz
Output Voltage Regulation (Line Mode)	-18%, +8%
Output Voltage Regulation (Battery Mode)	+/- 5%
Load Management Receptacles	Three switchable single-outlet 5-15R load banks
Output AC Waveform (AC Mode)	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.)	11 min. (1900W)
Runtime Half Load (min.)	28 min. (950W)
Expandable Runtime	Yes
External Battery Pack Compatibility	&nbsp;<a class="productLink" href="//tripplite.eaton.com/External-48V-2U-Rack-Tower-Battery-Pack-Enclosure-DC-Cabling-select-UPS-Systems~BP48V24-2U">BP48V24-2U</a>&nbsp;  (limit 1); &nbsp;  <a class="productLink" href="//tripplite.eaton.com/External-48V-4U-Battery-Pack-for-select-UPS-Systems~BP48V48RT4U">BP48V48RT4U</a>&nbsp;  (multi-pack compatible); &nbsp;  <a class="productLink" href="//tripplite.eaton.com/External-48V-2U-Rack-Tower-Battery-Pack-for-UPS-Systems~BP48V27-2US">BP48V27-2US</a>&nbsp;  (multi-pack compatible)
DC System Voltage (VDC)	48
Battery Recharge Rate (Included Batteries)	Less than 3.6 hours from 10% to 90% (typical, full load discharge)
Battery Access	Front panel battery access door
Internal UPS Replacement Battery Cartridge	&nbsp;<a class="productLink" href="//tripplite.eaton.com/2U-UPS-Replacement-48VDC-Battery-Cartridge-1-set-4-select-Tripp-Lite-SmartPro-UPS~RBC94-2U">RBC94-2U</a>&nbsp;  (quantity 2)
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	Input voltages between 127 and 145 are reduced by 12%
Undervoltage Correction	Input voltages between 96 and 108 are boosted by 12%
Severe Undervoltage Correction	Input voltages between 83 and 95 are boosted by 24%
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	
Switches	2 Switches control off/on power status and alarm-cancel/self-test operation; rear panel protected switches support low/high charger settings
Alarm Cancel Operation	Power-fail alarm can be silenced using alarm-cancel switch; once silenced, alarm will re-sound to indicate low-battery status
Audible Alarm	Audible alarm indicates power-failure, overload and low-battery conditions
LED Indicators	5 LEDs indicate line power, battery power, overload, voltage regulation and battery low/replace status
<b>SURGE / NOISE SUPPRESSION</b>	
UPS AC Suppression Joule Rating	570
UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
<b>PHYSICAL</b>	
Primary Form Factor	Rackmount
Rack Height	4U
Cooling Method	Fan
Included Mounting Accessory Description	Included 2POSTRMKITWM mounting accessory enables 2-post rackmount installation
Installation Form Factors Supported with Included Accessories	2 post 19 inch rackmount
Installation Form Factors Supported with Optional Accessories	4 post rackmount full-depth ( <a href="#">4POSTRAILKIT</a> ); 4 post rackmount short-depth ( <a href="#">4POSTRAILKITWM</a> ); Tower ( <a href="#">2-9USTAND</a> )
Minimum Required Rack Depth (cm)	53.34
Minimum Required Rack Depth (inches)	21
Minimum Required Rack Depth with External Battery Pack (cm)	64
Minimum Required Rack Depth with External Battery Pack (in.)	25
Minimum Required Rack Depth without External Battery Pack (cm)	58
Minimum Required Rack Depth without External Battery Pack (in.)	22.8

Optional Mounting Accessory Notes	Optional <a href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2-9USTAND</a> enables upright tower UPS placement; <a href="//tripplite.eaton.com/4-Post-Rack-Mount-Installation-Kit-select-Rack-Mount-UPS-Systems~4POSTRAILKIT">4POSTRAILKIT</a> mounting bracket enables installation in 4 post racks from 20.5 to 36 inches; <a href="//tripplite.eaton.com/4-Post-1U-Universal-Adjustable-Rack-Mount-Shelf-Kit-for-Wall-Mount-Racks~4POSTRAILKITWM">4POSTRAILKITWM</a> enables installation in 4-post short-depth racks from 14.5 to 23.5 inches (368 to 597mm)
Primary UPS Depth (mm)	452
Primary UPS Height (mm)	175
Primary UPS Width (mm)	439
Shipping Dimensions (hwd / in.)	14.00 x 23.00 x 23.50
Shipping Dimensions (hwd / cm)	35.56 x 58.42 x 59.69
Shipping Weight (lbs.)	124.00
Shipping Weight (kg)	56.25
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	17.50 x 43.94 x 45.21
UPS Power Module Dimensions (hwd, in.)	6.89 x 17.30 x 17.80
UPS Power Module Weight (kg)	45.50
UPS Power Module Weight (lbs.)	100.3
Unit Weight (lbs.)	100.300
Unit Weight (kg)	45.50
<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)	242
Battery Mode BTU / Hr. (Full Load)	885
AC Mode Efficiency Rating (100% Load)	97%
Audible Noise	45 dBA maximum, front side 1m
<b>COMMUNICATIONS</b>	
Network Management Cards	<a href="//tripplite.eaton.com/Web-Management-Accessory-Card~WEBCARDLX">WEBCARDLX</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
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	DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface; USB (HID enabled)
<b>LINE / BATTERY TRANSFER</b>	
Transfer Time	5 milliseconds
Low Voltage Transfer to Battery Power (Setpoint)	83
High Voltage Transfer to Battery Power (Setpoint)	145
<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 Voltage Regulation (AVR); Hot swappable batteries; Remote management; Surge/noise protection
<b>APPLICATIONS</b>	
UPS Applications	Large Network
<b>STANDARDS &amp; COMPLIANCE</b>	
Product Certifications	CSA (Canada); NOM (Mexico); UL 1778
Product Compliance	RoHS; FCC Part 15 Class A (USA)
<b>WARRANTY &amp; SUPPORT</b>	
Product Warranty Period (U.S. & Canada)	2-year warranty, 3 year with registration. Note: <a href="//tripplite.eaton.com/support/product-warranty-registration">Registration is required</a> for 3-year warranty.
Product Warranty Period (International)	2-year limited warranty
Product Warranty Period (Mexico)	2-year warranty, 3 year with registration. Note: <a href="//tripplite.eaton.com/support/product-warranty-registration">Registration is required</a> for 3-year warranty.
Product Warranty Period (Puerto Rico)	2-year warranty, 3 year with registration. Note: <a href="//tripplite.eaton.com/support/product-warranty-registration">Registration is required</a> for 3-year warranty.
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 <a href="//tripplite.eaton.com/support/insurance-policy">Ultimate Lifetime Insurance</a>



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