

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

MODEL NUMBER: **SMART2200RM2UN**



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. 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 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

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
- Hot-swap batteries, 96% efficiency, Sine wave output
- USB, RS232 & EPO ports, Pre-Installed WEBCARDLX Network Interface
- NEMA 5-20P input; 4 NEMA 5-15R & 4 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

- SMART2200RM2UN UPS system with WEBCARDLX Network Interface
- USB, Serial & EPO cabling
- 4 post rackmount installation kit
- Instruction manual

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 rackmount 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 SMART2200RM2UN line interactive 2U rack/tower UPS with 2200VA / 2.2kVA / 1920W capacity
- 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 & 4 NEMA 5-15/20R output receptacles, Two independently switchable 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 emissions
- Internal batteries offer 12 minutes at 50% load (960W) and 4.5 minutes at 100% load (1920W)
- Hot-swappable, user-replaceable internal batteries 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 or SSH
- Optional E2 sensors enable site monitoring of temperature, humidity and contact-closure status
- Reduce Service Calls with Auto Probe Autonomous Device Management. 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 Tripp Lite PowerAlert Network Shutdown Agent (PANSAs)
- HID-compliant USB port enables integration with built-in power management and auto shutdown features of Windows and Mac OS X
- USB & Serial ports enable data-saving unattended shutdown when used with Tripp Lite's PowerAlert software, available via FREE download from www.tripplite.com/poweralert
- Built-in Emergency Power Off (EPO) interface with cable



Specifications

| OVERVIEW | |
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| UPC Code | 037332178015 |
| UPS Type | Line-Interactive |
| INPUT | |
| Rated input current (Maximum Load) | 16A (120V) |
| 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 |
| Input Phase | Single-Phase |
| OUTPUT | |
| Output Volt Amp Capacity (VA) | 2200 |
| Output kVA Capacity (kVA) | 2.2 |
| Output Watt Capacity (Watts) | 1920 |
| Output kW Capacity (kW) | 1.92 |
| 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 switchable single-outlet load banks |
| 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 | |



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| Full Load Runtime (min.) | 4.5 min. (1920w) |
| Half Load Runtime (min.) | 12 min. (960w) |
| DC System Voltage (VDC) | 48 |
| Battery Recharge Rate (Included Batteries) | Less than 4.5 hours from 10% to 90% (typical, full load discharge) |
| Internal UPS Replacement Battery Cartridge | RBC94-2U </td> |
| Battery Access | Front panel battery access door |
| Battery Replacement Description | Hot-swappable, user replaceable batteries |
| Expandable Runtime | No |
| 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 |
| UPS AC Suppression Response Time | Instantaneous |
| EMI / RFI AC Noise Suppression | Yes |
| PHYSICAL | |
| 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 |



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| Installation Form Factors Supported with Optional Accessories | 2 post rackmount (2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM); 2-4 post front rail rackmount (Heavy-Duty-2-post-Front-Mounting-Ear-Kit~UPSHDEARKIT); 4 post rackmount short-depth (4-Post-1U-Universal-Adjustable-Rack-Mount-Shelf-Kit-for-Wall-Mount-Racks~4POSTRAILKITWM); Tower (2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND); Wallmount (2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM); |
| Minimum Required Rack Depth (cm) | 62.23 |
| Minimum Required Rack Depth (inches) | 24.5 |
| Optional Mounting Accessory Notes | Optional 2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND ; enables upright tower UPS placement; 2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM ; enables wall-mount and 2-post rackmount installation; 4-Post-1U-Universal-Adjustable-Rack-Mount-Shelf-Kit-for-Wall-Mount-Racks~4POSTRAILKITWM ; enables installation in 4-post short-depth racks from 14.5 to 23.5 inches (368 to 597mm); Heavy-Duty-2-post-Front-Mounting-Ear-Kit~UPSHDEARKIT ; enables installation in 2 or 4-post racks using front vertical rails only, without rear support |
| Primary Form Factor | Rackmount |
| Primary UPS Depth (mm) | 494 |
| Primary UPS Height (mm) | 87 |
| Primary UPS Width (mm) | 440 |
| Rack Height | 2U |
| Shipping Dimensions (hwd / cm) | 22.35 x 60.96 x 55.37 |
| Shipping Dimensions (hwd / in.) | 8.80 x 24.00 x 21.80 |
| Shipping Weight (kg) | 34.93 |
| Shipping Weight (lbs.) | 77.00 |
| 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 | 0 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% |



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| Audible Noise | 45 dBA maximum, front side 1m |
| COMMUNICATIONS | |
| Network Monitoring Port Description | Pre-installed WEBCARDLX Network Management Card interface |
| PowerAlert Software | For local monitoring via the UPS's built-in communication ports, download PowerAlert Local software at http://www.tripplite.com/poweralert |
| Communications Cable | Micro-USB, USB and DB9 cabling included |
| WatchDog Compatibility | Supports Watchdog application, OS and hard-reboot restart options for remote applications |
| 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 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 |
| 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 |
| SPECIAL FEATURES | |
| Grounding Lug | Back panel grounding lug |
| Cold Start (Startup in Battery Mode During a Power Failure) | Cold-start operation supported |
| High Availability UPS Features | Hot swappable batteries; Auto Probe Monitoring and Reboot (included) |
| 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); ROHS (Restriction of Hazardous Substances); Tested to CSA (Canada); Tested to NOM (Mexico); Tested to UL1778 (USA) |
| UPS 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) + G11 / 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 ; |



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Tripp Lite uses primary and third-party agencies to test its products for compliance with standards. See a list of Tripp Lite's testing agencies:

<https://www.tripplite.com/products/product-certification-agencies>