

SmartPro 120V 2.2kVA 1.92kW Line-Interactive Sine Wave UPS, Lithium Iron Phosphate (LiFePO4) Batteries, 2U, LCD, USB, DB9

MODEL NUMBER: **SMART2200RM2UL**



Protects connected mission-critical equipment against damage, downtime and data loss due to blackouts, brownouts, power surges and line noise. Special LiFePO4 battery provides long service life and more cycles.

Description

The SMART2200RM2UL SmartPro® 120V 2.2kVA 1.92kW Line-Interactive Sine Wave UPS provides battery backup and AC power protection against blackouts, brownouts, power surges and line noise that can damage electronics or destroy data. Ideal for backing up servers and network storage devices, the SMART2200RM2UL switches to 2.2kVA/1.92kW battery mode in milliseconds to keep your connected equipment running long enough to save files and shut down safely with no data loss.

The innovative lithium iron phosphate (LiFePO4) internal battery more than doubles the service life of an equivalent lead acid battery, and offers up to three times more charge/discharge cycles. It recharges to 100-percent capacity in less than two hours, making the SMART2200RM2UL an ideal backup in case of power outage. It provides 11.7 minutes of support at half load and 5.1 minutes at full load.

Featuring eight outlets and a 10-foot (3.1-meter) power cord with NEMA 5-20P input, the SMART2200RM2UL maintains 120V nominal output over an input range of 83V to 147V without using battery power. EMI/RFI noise filtering improves your equipment's performance and prevents damage. A 570-joule surge suppression rating protects your equipment from harmful power surges. With free downloadable PowerAlert® software (available via free download), the SMART2200RM2UL enables safe unattended system shutdown and file saves in case of a prolonged power failure.

Features

Protects Mission-Critical Rack-Mounted Equipment Provides fully regulated sine wave AC output for servers, network storage devices, telecom hardware and other applications where long battery lifespan is critical Audible alarm signals loss of utility power, overload and low battery 4 NEMA 5-15R & 4 NEMA 5-15/20R outlets 10-ft. (3.05 m) power cord with 120V NEMA 5-20P input 570-joule surge suppression rating 0.9 power factor rating 97% line-mode efficiency rating saves money in energy costs

Superior LiFePO4 Battery Backup Compared to Equivalent Lead Acid Battery More than 2x the service life Up to 3x more charge/discharge cycles Recharges to 100% capacity in less than 2 hr. Weighs 60% less, reducing overall UPS weight Supports half load up to 11.7 min. and full load up to 5.1 min.

2 Load Banks with Switchable Outlets Can control 2 outlets remotely to reboot equipment or shed nonessential loads

Highlights

- LiFePO4 battery offers longer life, more cycles and faster recharge
- 97% line-mode efficiency saves energy costs
- 4 NEMA 5-15R & 4 5-15/20R outlets—2 switchable via network interface
- Compatible with network management cards
- 11.7 min. runtime at half load; 5.1 min. at full load
- 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

- SMART2200RM2UL SmartPro 120V 2.2kVA 1.92kW Line-Interactive Sine Wave UPS
- USB cable
- DB9 cable
- EPO cable
- Rack-mounting hardware
- Owner's manual

Automatic Voltage Regulation (AVR) Maintains 120V nominal output over input range of 83V-145V without using battery power

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

Interactive LCD Screen Front-panel LCD with detailed UPS and site power status and operating data Rotates for easy viewing in rack-mount or tower configurations

Optional Network Management Cards Compatible with UPS management cards WEBCARDLX, SNMPWEBCARD and RELAYIOCARD

Communications Ports USB and DB9 ports enable data-saving unattended shutdown when used with PowerAlert software (available via free download at tripplite.eaton.com/products/power-alert) EPO port supports emergency shutdown in large facilities

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

Backed by Ultimate Lifetime Insurance \$250,000 Ultimate Lifetime Insurance covers any connected components (U.S., Canada and Puerto Rico only)

Specifications

OVERVIEW	
UPC Code	037332192646
UPS Type	Line-Interactive
INPUT	
Input Phase	Single-Phase
Rated input current (Maximum Load)	16A (120V)
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
Power Factor	.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	
Battery Type	Lithium Ion
Runtime Full Load (min.)	5.1 min. (1920W)
Runtime Half Load (min.)	11.7 min. (960W)
Expandable Runtime	No
DC System Voltage (VDC)	48
Battery Recharge Rate (Included Batteries)	1.4 hours from 10% to 90% (typical, full load discharge)
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
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
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
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 (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)	63.50
Minimum Required Rack Depth (inches)	25
Optional Mounting Accessory Notes	Optional 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 UPS Depth (mm)	489
Primary UPS Height (mm)	87
Primary UPS Width (mm)	440
Shipping Dimensions (hwd / in.)	10.24 x 25.59 x 27.76
Shipping Dimensions (hwd / cm)	26.01 x 65.00 x 70.51
Shipping Weight (lbs.)	61.10
Shipping Weight (kg)	27.71
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, cm)	8.71 x 43.99 x 48.95
UPS Power Module Dimensions (hwd, in.)	3.43 x 17.32 x 19.27
UPS Power Module Weight (kg)	18.95
UPS Power Module Weight (lbs.)	41.78

Unit Weight (lbs.)	41.780
Unit Weight (kg)	18.95
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)	221
AC Mode Efficiency Rating (100% Load)	97%
Battery Mode Heat Dissipation (BTU/Hr) @ Full Load	1343
Audible Noise	42.2 dBA typical / 50.6 dBA maximum, front side 1m
COMMUNICATIONS	
Network Management Cards	 WEBCARDLXE ; RELAYIOCARD
Network Monitoring Port Description	Supports detailed monitoring of UPS and site power conditions
Communications Cable	USB, DB9 and EPO cabling included
WatchDog Compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications
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 Management Card Description	Network management card optional
Communications Interface	DB9 Serial; EPO (emergency power off); 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 (requires WEBCARDLX); Automatic Voltage Regulation (AVR); Remote management; Surge/noise protection
Green Energy-Saving Features	Greater than 95% efficiency - GREEN UPS; Individually controllable load banks
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)	5-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 & Ultimate Lifetime Insurance