

Smart Pro Line Interactive 2U Rack/Tower Extended Run UPS - NAFTA assembled version of SMART2200RMXL2U

MODEL NUMBER: **SM2200RMNAFTA**



Description

2200VA line interactive UPS system for server, network and telecommunications equipment. 2U rackmount or tower form factor with an installed depth of only 19 inches. Expandable battery runtime with optional BP48V24-2U and BP48V60RT-3U external battery packs. Uninterruptible Power Supply (UPS) switches to battery-derived AC output during power failures and extreme voltage variations. Line interactive Automatic Voltage Regulation (AVR) offers two levels of voltage boost during brownouts and one level of voltage cut during overvoltages to maintain regulated 100, 110, 120v selectable output over an input range of 83-145V. Includes NEMA 5-20P input plug (with NEMA 5-15P plug option) and both NEMA 5-15R and 5-15/20R output receptacles. Network-grade AC surge and noise suppression. Network management interfaces support simultaneous communications via USB port, DB9 serial port and SNMPWEBCARD slot. HID-compliant USB interface enables full integration with built-in power management and auto shutdown features of Windows and Mac OS X. Supports simultaneous detailed monitoring of equipment load levels, self-test data and utility power conditions via all 3 network interfaces. Includes PowerAlert monitoring software and complete cabling. Emergency Power Off (EPO) interface. Integrated 3-bank PDU switching supports load shedding and remote-reboot of connected equipment. 3-stage metered current monitoring and battery charge status LEDs. Utility power and voltage regulation LEDs. Audible alarm. Self-test. 4-post rackmount accessories included; 2-9USTAND tower kit and 2POSTRMKITWM two post rack & wallmount accessories available. Field-replaceable, hot-swappable internal batteries and external battery packs. Attractive all-black color scheme. \$250,000 connected equipment insurance;

Features

- SmartPro line interactive UPS system is ideal for voice, data, medical and industrial networking applications
- Line interactive Automatic Voltage Regulation (AVR) offers two levels of voltage boost during brownouts and one level of voltage cut during overvoltages
- Maintains continuous operation through blackouts, voltage fluctuations and surges
- Corrects line voltage conditions as low as 83V and as high as 145 back to selectable 100/110/120V nominal values
- Standard internal battery set offers 16 minutes at half load (800w) and 6 minutes at full load (1600w)
- Optional BP48V24-2U and BP48V60RT3U external rack/tower battery packs enable extended runtime operation

Highlights

- 2200VA / 2.2kVA line interactive, extended-run 2U rack / tower UPS
- Maintains sine-wave 100/110/120V nominal output over an input range of 83 to 145V
- Network communications supported via HID enabled USB port, DB9 serial port, SNMP/Web card slot and EPO interface
- Current monitoring and switched PDU control via 3 individually controllable load banks
- Input: NEMA 5-20P (120V 20A / includes 5-15P plug 120V 15A) / Output: 4 NEMA 5-15/20R, 4 NEMA 5-15R (120V)
- \$250,000 Ultimate Lifetime Insurance (USA, Puerto Rico and Canada only)

Package Includes

SM2200RMNAFTA UPS system
PowerAlert software CD-ROM
USB, serial and EPO cabling
Owner's manual with warranty information

- Compact rackmount form factor installs using only 2 rack spaces (2U) with a maximum installed depth of only 19 inches
- Ships with all mounting accessories for 4 post rackmount installation
- Optional 2POSTRMKITWM enables 2 post rackmount or wallmount installation
- Optional 2-9USTAND accessory enables small-footprint upright tower placement
- Network interfaces support simultaneous communications via built-in USB, DB9 serial and SNMPWEBCARD slot
- HID compliant USB interface enables integration with built-in power management and auto shutdown features of Windows and Mac OS X
- Included PowerAlert UPS monitoring software supports safe unattended shutdown, monitoring and control via local connected servers, with the built-in ability to shutdown any number of additional servers over IP
- UPS interface supports on-battery, low-battery, power-restored, AC-voltage, DC-voltage, output current monitoring, battery charge current, battery capacity, AC line frequency, timed inverter sutoff, activate self-test, load bank output power control and remote reboot
- Built-in Emergency Power Off (EPO) interface with cable
- NEMA 5-20P input plug (user-installable NEMA 5-15P replacement plug included) / NEMA 5-15R & NEMA 5-15/20R output receptacles
- Integrated 3 bank switched PDU enables remote outlet management for load shedding or remote reboot of individual load banks (Each bank controls 1 outlet per load bank)
- Front panel LEDs offer current monitoring and battery charge level information
- UPS ships fully assembled in full compliance with DOT regulations, no time consuming connection of internal batteries by user required
- \$250,000 ULtimate Lifetime Insurance

Specifications

| OVERVIEW | |
|------------------------------------|--|
| UPC Code | 037332137814 |
| INPUT | |
| Rated input current (Maximum Load) | 13.3A (120V), 14.6A (110V), 16.0A (100V) |
| 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) | 1600 |

| | |
|--|---|
| Output Capacity (kW) | 1.6 |
| Power Factor | 0.7 |
| Nominal Voltage Details | 120V default (voltage selection via back panel dipperswitches) |
| Frequency Compatibility | 50 / 60 Hz |
| Output Voltage Regulation (Line Mode) | -14%, +6% |
| 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 | 100V; 110V; 120V |
| Output Receptacles | (4) 5-15R; (4) 5-15/20R |
| BATTERY | |
| Runtime Full Load (min.) | 6 min. (1600w) |
| Runtime Half Load (min.) | 16 min. (800w) |
| Expandable Runtime | Yes |
| External Battery Pack Compatibility | BP48V24-2U (limit 1); BP48V60RT-3U (multi-pack compatible); BP48V60-3UNAFTA (multi-pack compatible) |
| DC System Voltage (VDC) | 48 |
| Battery Recharge Rate (Included Batteries) | Less than 4.5 hours from 10% to 90% |
| 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 79 to overvoltages to 147 |
| Overvoltage Correction | Voltage reduction of 12% applies when input is between 127 and 145 (120V), 116 and 133 (110V), 106 and 121 (100V) |
| Undervoltage Correction | Voltage boost of 12% applies when input voltage is between 96 and 108 (120V), 87 and 99 (110V), 83 and 90 (100V) |
| Severe Undervoltage Correction | Voltage boost of 24% applies when input voltage is between 83 and 95 (120V only) |
| USER INTERFACE, ALERTS & CONTROLS | |

| | |
|---|--|
| Switches | 2 Switches control off/on power status and alarm-cancel/self-test operation; rear panel protected switches support nominal voltage selection |
| 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 |
| 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 | Adjustable mounting rail kit included |
| Installation Form Factors Supported with Optional Accessories | 2 post rackmount (2POSTRMKITWM); Wallmount (2POSTRMKITWM); Tower (2-9USTAND) |
| Primary UPS Depth (mm) | 483 |
| Primary UPS Height (mm) | 89 |
| Primary UPS Width (mm) | 445 |
| Shipping Dimensions (hwd / in.) | 9.00 x 23.50 x 20.00 |
| Shipping Dimensions (hwd / cm) | 22.86 x 59.69 x 50.80 |
| Shipping Weight (lbs.) | 72.00 |
| Shipping Weight (kg) | 32.66 |
| UPS Housing Material | Steel |
| UPS Power Module Dimensions (hwd, cm) | 8.89 x 44.45 x 48.26 |
| UPS Power Module Dimensions (hwd, in.) | 3.5 x 17.5 x 19 |
| UPS Power Module Weight (kg) | 29.03 |
| UPS Power Module Weight (lbs.) | 64 |
| 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) | 168.2 |
| AC Mode Efficiency Rating (100% Load) | 97% |
| Battery Mode Heat Dissipation (BTU/Hr) @ Full Load | 604.4 |
| COMMUNICATIONS | |
| Network Monitoring Port Description | Supports detailed monitoring of UPS and site power conditions |
| PowerAlert Software | Included |
| Communications Cable | USB and DB9 cabling included |
| WatchDog Compatibility | Supports Watchdog application, OS and hard-reboot restart options for remote applications |
| Communications Interface | USB (HID enabled); DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface |
| LINE / BATTERY TRANSFER | |
| Transfer Time | 2-4 milliseconds |
| Low Voltage Transfer to Battery Power (Setpoint) | 83 (120V), 87 (110V), 83 (100V) |
| High Voltage Transfer to Battery Power (Setpoint) | 145 (120V), 133 (110V), 121 (100V) |
| FEATURES & SPECIFICATIONS | |
| Cold Start (Startup in Battery Mode During a Power Failure) | Cold-start operation supported |
| High Availability UPS Features | Hot swappable batteries |
| Green Energy-Saving Features | Greater than 95% efficiency - GREEN UPS; Individually controllable load banks |
| Grounding Details | Back panel grounding lug |
| WARRANTY & SUPPORT | |
| Product Warranty Period (Worldwide) | 2-year limited warranty |
| Connected Equipment Insurance (U.S., Canada & Puerto Rico) | \$250,000 & Ultimate Lifetime Insurance |