SmartOnline Expandable 2U Rack / Tower UPS System - NAFTA assembled version of SU2200RTXL2Ua

MODEL NUMBER: **SU2200RMNAFTA**

Description

2200VA on-line, double-conversion UPS system for critical server, network and telecommunications equipment. 2U rackmount form factor with an installed depth of only 19 in. Expandable battery runtime with optional BP48V60-3UNAFTA external battery packs. Full-time sine wave 100, 110 or 120V +/-2% output. Online, double-conversion Uninterruptible Power Supply (UPS) actively converts raw incoming AC power to DC, then re-converts output back to completely regulated, filtered AC output. Operates continuously without using battery power during brownouts to 65V and overvoltages to 138V. NEMA 5-20P input plug; NEMA 5-15/20R and NEMA L5-20R output receptacles. Network-grade AC surge and noise suppression. Zero transfer time between AC and battery operation. Network management interfaces support simultaneous communications via USB port, DB9 serial port and SNMPWEBCARD slot. HID-compliant USB interface enables 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 2-bank PDU switching supports load shedding and remote-reboot of connected equipment. 3-stage metered current monitoring and battery charge status LEDs. LED display panel easily rotates for better viewing in rackmount or tower configurations. Dataline surge suppression for dialup, DSL or network Ethernet connection. Utility power and voltage regulation LEDs. Audible alarm. Self-test. Fault-tolerant auto-bypass mode. 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 insur;

Features

- SmartOnline high performance UPS system is ideal for critical voice, data, medical and industrial

Highlights

- 2200VA / 2.2kVA on-line, double-conversion, extended-run 2U rack / tower UPS
- Maintains sine-wave 100/110/120V +/-2% output during overvoltages to 138 and brownouts as low as 65V (50/60Hz auto-sensing)
- Simultaneous communications via HID compliant USB port, serial port, SNMP/Web card slot and EPO interface
- Fault tolerant auto-bypass mode, current monitoring and switched PDU control via 2 switchable output load banks
- Input: NEMA 5-20P (120V) / Output: 6 NEMA 5-15/20R and 1 NEMA L5-20R (120V)
- $250,000 Ultimate Lifetime Insurance (USA and Canada Only)

Package Includes

- SU2200RMNAFTA On-line Double-Conversion UPS System
- PowerAlert Software and cabling
- Mounting hardware for 4 post rack enclosures
- Instruction manual with warranty information

network applications

- True on-line, double-conversion UPS provides perfectly regulated sine wave output within 2% of 100/110/120V (user selectable) under all usage conditions
- Maintains continuous operation through blackouts, voltage fluctuations and surges with zero transfer time
- Removes harmonic distortion, fast electrical impulses, frequency variations and other hard to solve power problems not addressed by other UPS types
- Corrects line voltage conditions as low as 65V and as high as 138V back to selectable 100/110/120V (+/-2%) values
- Standard internal battery set offers 18 minutes runtime at half load (800W) and 6 minutes at full load (1600W)
- Optional BP48V60-3UNAFTA external battery pack increases runtime to 132 minutes at half load (800W) and 61 minutes at full load (1600W/multi-pack compatible)
- 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
- Fault tolerant auto-bypass maintains continuous utility output to connected equipment, even in cases where the UPS suffers internal failure and requires maintenance
- 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, plus 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 shutoff, activate self-test, load bank output power control and remote reboot, UPS nominal voltage adjustment and UPS line to battery power voltage setpoints
- Built-in Emergency Power Off (EPO) interface with cable
- NEMA 5-20P input plug /NEMA 5-15/20R & NEMA L5-20R output receptacles
- Integrated 2 bank switched PDU enables remote outlet management for load shedding or remote reboot of individual load banks (bank 1 has two outlets/bank two has four outlets)
- 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
- Single line TEL/DSL or network ethernet line surge suppression

- $250,000 Ultimate Lifetime Insurance

Specifications

OUTPUT	
Output Volt Amp Capacity (VA)	2200
Output kVA Capacity (kVA)	2.2
Output Watt Capacity (Watts)	1600
Output kW Capacity (kW)	1.6
Power Factor	0.7
Crest Factor	3:1
Nominal Output Voltage(s) Supported	100V; 110V; 120V
Nominal Voltage Details	120V default
Frequency Compatibility	50 / 60 Hz
Frequency Compatibility Details	Output frequency matches input nominal on startup, defaults to 60 Hz on cold-start
Output Voltage Regulation (Line Mode)	+/- 2%
Output Voltage Regulation (Economy Line Mode)	+/- 10%
Output Voltage Regulation (Battery Mode)	+/- 2%
Output Receptacles	(6) 5-15/20R; (1) L5-20R
Load Management Receptacles	Two switchable three-outlet 5-15/20R load banks
Output AC Waveform (AC Mode)	Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
INPUT	
Rated input current (Maximum Load)	16A
Nominal Input Voltage(s) Supported	100V AC; 110V AC; 120V AC
UPS Input Connection Type	5-20P
Input Circuit Breakers	30A
UPS Input Cord Length (ft.)	10
UPS Input Cord Length (m)	3.0
Recommended Electrical Service	20A 120V
Input Cord Length (m)	3

BATTERY

Full Load Runtime (min.)	6 min. (1600w)
Half Load Runtime (min.)	18 min. (800w)
Expandable Battery Runtime	Extended runtime supported via optional external battery packs
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 6 hours from 10% to 80%
Internal UPS Replacement Battery Cartridge	RBC94-2U
Battery Access	Front panel battery access door
Battery Replacement Description	Hot-swappable, user replaceable batteries

VOLTAGE REGULATION

Voltage Regulation Description	Online, double-conversion power conditioning
Overvoltage Correction	2% output voltage regulation during overvoltages to 138
Undervoltage Correction	2% output voltage regulation during undervoltages to 80
Severe Undervoltage Correction	2% output voltage regulation during undervoltages to 65 (under 70% load only)

USER INTERFACE, ALERTS & CONTROLS

Switches	2 Switches control off/on power status and alarm-cancel/self-test operation
Alarm Cancel Operation	Power-fail alarm can be silenced using alarm-cancel switch
Audible Alarm	Audible alarm indicates UPS startup, power-failure, low-battery, overload, UPS fault and remote shutdown conditions
LED Indicators	14 LEDs indicate line power, online mode, economy/bypass mode, on-battery, overload, battery low, replace battery and fault status information; 4-LED meter displays load and battery charge levels; LED panel rotates for viewing in rack/tower formats

SURGE / NOISE SUPPRESSION

UPS AC Suppression Joule Rating	1320
UPS AC Suppression Response Time	Instantaneous
UPS Dataline Suppression	1 line TEL/DSL (1 in / 1 out); 10/100Base T Ethernet
EMI / RFI AC Noise Suppression	Yes

PHYSICAL

Installation Form Factors Supported with Optional Accessories	2 post rackmount (2POSTRMKITWM); Wallmount (2POSTRMKITWM); Tower (2-9USTAND)
Primary Form Factor	Rackmount

UPS Power Module Dimensions (hwd, in.)	3.5 x 17.5 x 19
UPS Power Module Dimensions (hwd, cm)	8.9 x 44.4 x 48.3
Rack Height (U Spaces)	2
UPS Power Module Weight (lbs.)	47.4
UPS Power Module Weight (kg)	21.50
UPS Shipping Dimensions (hwd / in.)	9.8 x 20.2 x 24
UPS Shipping Dimensions (hwd / cm)	24.8 x 51.4 x 61
Shipping Weight (lbs.)	57.3
Shipping Weight (kg)	26
Cooling Method	Fan
UPS Housing Material	Steel
Primary UPS Height (mm)	89
Primary UPS Width (mm)	444
Primary UPS Depth (mm)	483
Shipping Height (mm)	249
Shipping Width (mm)	513
Shipping Depth (mm)	610
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)	812.9
AC Economy Mode BTU / Hr. (Full Load)	347.2
Battery Mode BTU / Hr. (Full Load)	885.6
AC Mode Efficiency Rating (100% Load)	87%
AC Economy Mode Efficiency Rating (100% Load)	94%
COMMUNICATIONS	
Communications Interface	DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface
Network Monitoring Port Description	Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 and contact closure communications

PowerAlert Software	Included
Communications Cable	DB9 cable included
WatchDog Compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications
LINE / BATTERY TRANSFER	
Transfer Time	No transfer time (0 ms.) in online, double-conversion mode
Low Voltage Transfer to Battery Power (Setpoint)	80V (100% load), 65V (<70% load)
High Voltage Transfer to Battery Power (Setpoint)	138
SPECIAL FEATURES	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
High Availability UPS Features	Automatic inverter bypass; Hot swappable batteries
Green Energy-Saving Features	High efficiency economy mode operation; Individually controllable load banks; Schedulable daily hours of economy mode operation
CERTIFICATIONS	
UPS Certifications	Tested to UL1778 (USA); Tested to CSA (Canada); Tested to NOM (Mexico); Meets FCC Part 15 Category A (EMI); Meets FCC Part 68 / Industrie Canada (telecommunications); ROHS (Restriction of Hazardous Substances)
WARRANTY	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	$250,000 Ultimate Lifetime Insurance