SmartOnline Expandable Tower UPS System - NAFTA assembled version of SU2200XLa

MODEL NUMBER: **SU2200XLNAFTA**

Description

2200VA on-line, double-conversion UPS system for critical server, network and telecommunications equipment. Upright tower form factor. Expandable battery runtime with optional BP48V60-3UNAFTA external battery packs. Full-time sine wave 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 (optional 5-15P inlcuded); 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. 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. 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 network applications

- True on-line, double-conversion UPS provides perfectly regulated sine wave output within 2% of 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 110/120V (+/-

Highlights

- 2200VA / 2.2kVA on-line, double-conversion, extended-run tower UPS

- Maintains sine-wave 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, optional 5-15P included) / Output: 6 NEMA 5-15/20R and 1 NEMA L5-20R (120V)

- $250,000 Ultimate Lifetime Insurance (USA and Canada Only)

Package Includes

- SU2200XLNAFTA UPS System

- PowerAlert Software and cabling

- Instruction manual with warranty information

2%) values

- Standard internal battery set offers 14 minutes runtime at half load (800W) and 4.5 minutes at full load (1600W)
- Optional BP48V60-3UNAFTA external battery packs offer expandable battery runtime
- Space saving upright tower format
- 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 (user-installable NEMA 5-15P replacement plug included)/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
- 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 Insuran

Specifications

OVERVIEW	
UPC Code	037332137760

INPUT	
Rated input current (Maximum Load)	16A (120V), 17.6A (110V)
Nominal Input Voltage(s) Supported	110V AC; 120V AC
UPS Input Connection Type	5-20P
UPS Input Connection Description	Includes user-installable 5-15P replacement plug

Input Circuit Breakers	30A
UPS Input Cord Length (ft.)	10
UPS Input Cord Length (m)	3.1
Recommended Electrical Service	20A 120V

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 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%
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
Nominal Output Voltage(s) Supported	110V; 120V
Output Receptacles	(6) 5-15/20R; (1) L5-20R

BATTERY	
Full Load Runtime (min.)	4.5 min. (1600w)
Half Load Runtime (min.)	14 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 5 hours from 10% to 90%

Internal UPS Replacement Battery Cartridge	RBC48-SUTWR
Battery Access	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 - includes 4-LED meter display for load and battery charge level

SURGE / NOISE SUPPRESSION

UPS AC Suppression Joule Rating	570
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

Cooling Method	Fan
Installation Form Factors Supported with Included Accessories	Tower
Primary Form Factor	Tower
Primary UPS Depth (mm)	495
Primary UPS Height (mm)	259
Primary UPS Width (mm)	229
Shipping Dimensions (hwd / cm)	38.74 x 33.02 x 60.96
Shipping Dimensions (hwd / in.)	15.25 x 13.00 x 24.00
Shipping Weight (kg)	26.58
Shipping Weight (lbs.)	58.60
UPS Housing Material	Steel

UPS Power Module Dimensions (hwd, cm)	25.91 x 22.86 x 49.53
UPS Power Module Dimensions (hwd, in.)	10.2 x 9 x 19.5
UPS Power Module Weight (kg)	24.22
UPS Power Module Weight (lbs.)	53.4
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%
Audible Noise	< 45 dB at front side 1m
COMMUNICATIONS	
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 cabling included
WatchDog Compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications
Communications Interface	DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface
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

STANDARDS & COMPLIANCE	
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