SmartOnline 208/230V 2.2kVA 1.98kW Double-Conversion UPS, 2U, Extended Run, Network Card Options, LCD, USB, DB9, ENERGY STAR

MODEL NUMBER: **SUINT2200LCD2U**

Highlights

- Zero transfer time suitable for advanced network applications
- 2% output voltage regulation in online and battery modes
- Selectable 200/208/220/230/240V output voltage
- Meets strict ENERGY STAR efficiency guidelines
- 11.7 min. runtime at half load; 4.3 min. at full load

Package Includes

- SUINT2200LCD2U SmartOnline 2200VA/1980W On-Line Double-Conversion UPS
- 4-post rack-mount installation kit
- USB cable
- RS-232 cable
- C19-to-C20 power cable
- (2) C13-to-C14 power cables
- Owner's manual

Description

The SUINT2200LCD2U SmartOnline® 2200VA/1980W On-Line Double-Conversion UPS converts AC input to DC power, and then converts DC to fully regulated sine wave AC output with +/-2% voltage regulation in online and battery modes. ENERGY STAR certification saves you money by meeting strict EPA guidelines. An interactive front-panel LCD interface provides detailed real-time UPS status and advanced setup and configuration options.

In case of AC power outage, the internal batteries support 11.7 minutes of runtime at half load and 4.3 minutes at full load. Extended runtime is possible with optional external battery packs. "Smart" battery packs, such as Tripp Lite's BP48V27-2US, are automatically sensed and configured during replacement. An intelligent battery management system extends battery life.

Managing the UPS is simplified through the interactive front-panel LCD interface, which displays operating conditions and diagnostic data, such as load and battery levels. You can set power strategies to reflect your protection priorities, whether it's precise power quality for sensitive systems or the highest possible electrical efficiency, all while ensuring 100% uptime for your systems.

Power is filtered to protect connected equipment against surges and EMI/RFI line noise that can damage equipment or destroy data. Adding an optional Tripp Lite network management accessory card permits remote management of the UPS, including reboots and activity logs.

Features

Protects Mission-Critical Rack-Mounted Equipment

- Converts AC input to DC power, then DC to fully regulated sine wave AC output

- +/-2% voltage regulation in online and battery modes
- Selectable 200/208/220/230/240V output voltage
- 2200VA/1980W capacity
- 1 C19 and 8 C13 outlets
- 936-joule surge suppression rating

Interactive Front-Panel LCD
- Reports detailed status information, including load and battery levels
- Offers advanced configuration options, including output voltage and power strategies

5 Power Strategies
- Auto Adaptive enables high efficiency and high-quality operation as necessary for ideal equipment protection
- Max Efficiency favors economy operation with high 95% efficiency
- Max Quality favors on-line double-conversion mode, maintaining +/-2% output voltage regulation and zero transfer time
- Frequency Regulation and Frequency Conversion enable +/-0.05 Hz output regulation for selected frequency (50/60 Hz)

Reliable, Expandable Battery Backup
- Supports half load for 11.7 min. and full load for 4.3 min.
- Add external battery packs for extra runtime
- "Smart" battery packs, such as Tripp Lite's BP48V27-2US, are automatically sensed and configured during replacement
- Full capacity available with and without external battery packs
- Battery-independent restart ensures automatic power-up after lengthy power outages

Highly Customizable
- Customize communications and behavior to integrate with device makers' specific needs
- Selectable auto-restart from 0 to 60 sec. after AC power is restored
- Selectable minimum battery charge level before auto-restart
- Schedule system reboot if USB signal from connected device is lost
- Set overload thresholds and low battery levels for alert and shutdown
- Remote on/off support via DB9

ENERGY STAR Certification
- Saves money and energy and protects environment by meeting strict EPA efficiency guidelines

Network Management Card Options / USB & Serial Ports

- Compatible Tripp Lite UPS management card options WEBCARDLX and SNMPWEBCARD support a wide variety of UPS control and monitoring capabilities
- 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

Specifications

MODEL TEXT	
Key Benefit	High-performance on-line double-conversion UPS with interactive LCD interface ideal for any critical voice, data, medical or industrial IT application. Converts AC input to DC and then fully regulated sine wave AC power.

OUTPUT	
Output Volt Amp Capacity (VA)	2200
Output kVA Capacity (kVA)	2.2
Output Watt Capacity (Watts)	1980
Output kW Capacity (kW)	1.98
Output Capacity Details	DE-RATING INFORMATION: Max output in Frequency Conversion mode is reduced to 1386 watts for 208/220/230/240V output voltages; Max output is 1584W (1108W in Frequency Conversion mode) at 200V output voltage OVERLOAD CAPACITY: Supports inverter operation up to 105% load continuously, 125% for 3 minutes, 150% for 30 seconds and >150% for 0.5 seconds before switching to BYPASS (when bypass input voltage and frequency are WITHIN bypass limits) or SHUTDOWN (when bypass input voltage or frequency are OUTSIDE bypass limits).
Power Factor	0.9
Crest Factor	3:1
Nominal Output Voltage(s) Supported	200V; 208V; 220V; 230V; 240V
Nominal Voltage Details	Nominal output voltage is user configured on first power-on
Frequency Compatibility	50 / 60 Hz; Supports 50 to 60 Hz and 60 to 50 Hz conversion
Frequency Compatibility Details	Output frequency matches input nominal on startup; Output capacity de-rates by 30% during frequency conversion operation
Output Voltage Regulation (Line Mode)	+/- 2%
Output Voltage Regulation (Economy Line Mode)	+/- 10%
Output Voltage Regulation (Battery Mode)	+/- 2%
Output Receptacles	(8) C13; (1) C19
Included Output Power Cables	Includes 2 C13 to C14 and 1 C19 to C20 power cables
Load Management Receptacles	Two switchable outlet load banks (Bank 1: 3 C13 outlets / Bank 2: 1 C19 + 2 C13 outlets)
Output AC Waveform (AC Mode)	Pure Sine wave

Output AC Waveform (Battery Mode)	Pure Sine wave

INPUT	
Rated input current (Maximum Load)	10.94A
Nominal Input Voltage(s) Supported	200V AC; 208V AC; 220V AC; 230V AC; 240V AC
UPS Input Connection Type	C20 inlet
Input Phase	Single-Phase

BATTERY	
Full Load Runtime (min.)	4.3 min. (1980w)
Half Load Runtime (min.)	11.7 min. (990w)
Expandable Battery Runtime	Supports extended runtime with optional external battery packs
External Battery Pack Compatibility	BP48V24-2U (limit 1); BP48V27-2US (multi-pack compatible); BP48V60RT-3U (multi-pack compatible)
DC System Voltage (VDC)	48
Battery Recharge Rate (Included Batteries)	Less than 3.0 hours from 10% to 90% (typical, full load discharge)
Internal UPS Replacement Battery Cartridge	RBC48S
Battery Access	Front panel battery access door
Battery Replacement Description	Hot-swappable, replaceable batteries
Expandable Runtime	Yes

VOLTAGE REGULATION	
Voltage Regulation Description	Online, double-conversion power conditioning
Overvoltage Correction	2% output voltage regulation during overvoltages to 288V
Undervoltage Correction	2% output voltage regulation during undervoltages to 160V (100% load), 130V (70% load), 100V (30% load)

USER INTERFACE, ALERTS & CONTROLS	
Front Panel LCD Display	Interactive front-panel LCD interface reports UPS operating mode, detailed UPS status and site-power information; LCD interface also enables a variety of advanced UPS setup and configuration options
Switches	5 front panel switches: On/Off, Up, Down and Escape
Alarm Cancel Operation	Power-fail alarm can be silenced by following on-screen prompts
Audible Alarm	Audible alarm indicates power failure, low battery, overload and fault
LED Indicators	4 front panel LEDs: AC input (green), AC output (green), Battery (yellow), Fault (red)

SURGE / NOISE SUPPRESSION	
UPS Dataline Suppression Details	Single line dialup / network dataline protection included

EMI / RFI AC Noise Suppression	Yes
AC Suppression Joule Rating	936
AC Suppression Response Time	Instantaneous
PHYSICAL	
Included Mounting Accessory Description	4 post installation accessories included
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount
Installation Form Factors Supported with Optional Accessories	2 post rackmount (2POSTRMKITWM); Tower (2-9USTAND)
Primary Form Factor	Rackmount
UPS Power Module Dimensions (hwd, in.)	3.46 x 17.24 x 19.53
UPS Power Module Dimensions (hwd, cm)	8.79 x 43.79 x 49.61
Rack Height (U Spaces)	2
Minimum Required Rack Depth (inches)	26
Minimum Required Rack Depth (cm)	66.04
UPS Power Module Weight (lbs.)	50.94
UPS Power Module Weight (kg)	23.11
UPS Shipping Dimensions (hwd / in.)	9.45 x 22.24 x 27.56
UPS Shipping Dimensions (hwd / cm)	24.00 x 56.49 x 70.00
Shipping Weight (lbs.)	60
Shipping Weight (kg)	27.2
Cooling Method	Fan
UPS Housing Material	Metal
Minimum Required Rack Depth (mm)	660
Primary UPS Height (mm)	88
Primary UPS Width (mm)	438
Primary UPS Depth (mm)	496
Shipping Height (mm)	240
Shipping Width (mm)	565
Shipping Depth (mm)	700
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	5 to 95%, non-condensing
AC Mode BTU / Hr. (Full Load)	675
AC Economy Mode BTU / Hr. (Full Load)	356
Battery Mode BTU / Hr. (Full Load)	1012
AC Mode Efficiency Rating (100% Load)	>90%
AC Economy Mode Efficiency Rating (100% Load)	>95%
Audible Noise	<50dB at front side 1M

COMMUNICATIONS

Communications Interface	USB (HID enabled); DB9 Serial; Contact closure; EPO (emergency power off); Slot for SNMP/Web interface
Network Management Cards	SNMPWEBCARD; WEBCARDLX
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	USB and DB9 cabling 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; 2-12 ms. transfer time during economy mode operation
Low Voltage Transfer to Battery Power (Setpoint)	160V (100% load), 140V (66% load), 120V (33% load)
High Voltage Transfer to Battery Power (Setpoint)	288V

SPECIAL FEATURES

Grounding Lug	Back panel grounding lug included
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

CERTIFICATIONS

UPS Certifications	CE; ENERGY STAR Qualified; Tested to CSA (Canada); Tested to EAC (Belarus, Kazakhstan, Russia); Tested to SASO (Saudi Arabia); Tested to UL1778 (USA)
UPS Certification Details	IEC62040-1:2008+A1; UL1778 5th; Meets EMI approvals IEC62040-2:2006; FCC Part 15

WARRANTY	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	$250,000 Ultimate Lifetime Insurance