

## 208/230V 2200VA 1.98kW Double-Conversion UPS - 9 Outlets, Extended Run, Card Slot, LCD, USB, DB9, 2U

MODEL NUMBER: **SUINT2200LCD2U**



On-line double-conversion UPS provides pure sine wave AC output to server and network equipment in data centers and computer rooms.

### Features

#### Double-Conversion UPS Protects Equipment against Damage, Downtime and Data Loss

This 200/208/220/230/240V 50/60 Hz UPS system maintains perfect output by converting AC input to DC, then reconverting UPS output to fully regulated sine wave AC with +/-2% voltage regulation in online and battery modes. Featuring a 1980W capacity, high 0.9 power factor, 936 joules of surge suppression, true on-line operation with pure sine wave output and zero transfer time to battery mode in on-line double-conversion mode, the SmartOnline® SUINT2200LCD2U double-conversion UPS provides the highest level of AC power protection and battery backup for critical network closet, computer room and data center equipment.

#### Set Power Strategies to Reflect Your Protection Priorities

Pick your power strategy, from precise power for sensitive systems to the highest possible electrical efficiency, while ensuring 100% uptime. Choose from five selectable strategies: Max Efficiency, Max Quality, Frequency Regulation, Frequency Conversion and Auto Adaptive, which automatically offers increased efficiency when power conditions are good and enhanced power quality when power conditions are poor.

#### Individually Controllable Load Banks Let You Access and Control Outlets Remotely

Six C13 outlets are split into two individually switchable load banks, one with three C13 outlets and the other with three C19 outlet, allowing you to reboot select components or shed loads remotely. In addition to those seven outlets, this UPS provides two more C13 outlets in their own unswitched bank for powering critical components.

#### Reliable, Expandable Battery Backup Keeps You Operational Through Power Outages

The field-replaceable, hot-swappable internal battery (RBC48S) provides 11.7 minutes of support at half load (990W) and 4.3 minutes at full load (1980W), keeping protected equipment operational through power failures. For mission-critical applications demanding scalable extended runtime, the UPS supports "smart" external battery packs, such as Tripp Lite's BP48V27-2US (sold separately). Both the internal and external batteries are automatically sensed and configured during replacement to offer accurate runtime-remaining and battery age notifications during outages. The intelligent battery management system with temperature-compensated charging extends battery life.

### Highlights

- Offers network-grade protection against power failures and voltage fluctuations
- Zero transfer time between on-line and battery modes for uninterrupted operation
- Optional external battery packs provide additional runtime for applications requiring it
- Add optional WEBCARDLX with latest version of PADM20 for IP-based Auto Probe feature
- ENERGY STAR-certified to save electricity, lower costs, and protect the environment

### Applications

- Deliver perfectly regulated sine wave output to mission-critical equipment
- Protect connected components from dangerous surges, spikes and line noise
- Keep equipment operational through power failures
- Allow time to save data and safely shut down components in case of a prolonged blackout

### Package Includes

- SUINT2200LCD2U SmartOnline Double-Conversion UPS
- USB cable
- RS-232 cable
- EPO cable
- C19-to-C20 power cable
- (2) C13-to-C14 power cables
- 4-post rack-mounting hardware
- Owner's manual

#### Automatic Bypass Maintains Utility Output During Fault Conditions

Auto-bypass mode keeps connected equipment powered and operational, even during UPS fault conditions.

#### ENERGY STAR-Certified Economy Mode Helps You Save Money and Protect the Environment

By meeting strict EPA efficiency guidelines, this ENERGY STAR-certified UPS system helps you save money and energy. A power-saving Economy mode setting option offers enhanced efficiency and reduced BTU output when utility power is already high quality.

#### Automatically Turns Back On After Power Is Restored

Battery-independent restart ensures automatic UPS power-up without user interaction after lengthy power outages, even when batteries are expired and require replacement.

#### Intuitive Front-Panel Interface for Convenient UPS Operation and Monitoring

The front-panel LCD screen reports UPS operating mode, detailed UPS status and site-power information, as well as a variety of advanced UPS setup and configuration options. LEDs indicate AC input/output, battery and fault status.

#### Advanced Communications Ports Allow for Automatic Saves and Shutdowns

RS-232 and HID-compliant USB ports connect to a computer running Tripp Lite's free downloadable PowerAlert® software to enable safe unattended file saves and system shutdown in case of a prolonged power failure. An EPO port connects the UPS to a contact closure switch to enable emergency inverter shutdown. Cables are included.

#### Optional WEBCARDLX Network Interface Offers 24/7 Access

The optional WEBCARDLX (sold separately) with the latest version of PowerAlert Device Manager firmware (PADM20) provides enhanced remote management capabilities, including customizable dashboard graphs to fit user preferences. The PADM20 upgrade and Tripp Lite's PowerAlert Element Manager (PAEM) software form a powerful tool for expanding maintenance functions in large installations, including firmware update checks and backup and restoration of device configurations. Auto Probe allows a UPS with switched loads to automatically reboot devices if a network communication failure is detected. This preserves uptime and minimizes the time and expense associated with on-site support.

#### Versatile Installation Options

Hardware is included for mounting the UPS system in 2U of space in an EIA-standard 19-inch 4-post rack. Use the optional 2POSTRMKITWM (sold separately) for 2-post rack mounting or the optional 2-9USTAND (sold separately) for mounting in an upright tower position. The C20 power inlet accepts a variety of user-supplied input cords.

## Specifications

OVERVIEW	
UPC Code	037332183330
UPS Type	On-Line
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
Total Harmonic Distortion	<3%

OUTPUT	
Output Capacity (VA)	2200
Output Capacity (kVA)	2.2
Output Capacity (Watts)	1980
Output Capacity (kW)	1.98
Output Capacity Details	<p>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</p> <p>OVERLOAD CAPACITY: Supports inverter operation up to 105% load continuously, 125% for 3 minutes, 150% for 30 seconds and &gt;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).</p>
Power Factor	0.9
Crest Factor	3:1
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%
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 + 3 C13 outlets)
Output AC Waveform (AC Mode)	Pure Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
Nominal Output Voltage(s) Supported	200V; 208V; 220V; 230V; 240V
Output Receptacles	(8) C13; (1) C19
Individually Controllable Load Banks	Yes
BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
Runtime Full Load (min.)	4.3 min. (1980W)
Runtime Half Load (min.)	11.7 min. (990W)
Expandable Runtime	Yes

External Battery Pack Compatibility	<a &gt;bp48v24-2u<="" a="" href="/tripplite.eaton.com/External-48V-2U-Rack-Tower-Battery-Pack-Enclosure-DC-Cabling-select-UPS-Systems~BP48V24-2U"> (limit 1); <a &gt;bp48v27-2us<="" a="" href="/tripplite.eaton.com/External-48V-2U-Rack-Tower-Battery-Pack-for-UPS-Systems~BP48V27-2US"> (multi-pack compatible); <a &gt;bp48v60rt-3u<="" a="" href="/tripplite.eaton.com/External-48V-3U-Rack-Tower-Battery-Pack-Enclosure-DC-Cabling-select-UPS-Systems~BP48V60RT-3U"> (multi-pack compatible)         </a></a></a>
DC System Voltage (VDC)	48
Battery Recharge Rate (Included Batteries)	Less than 3.0 hours from 10% to 90% (typical, full load discharge)
Battery Access	Front panel battery access door
Internal UPS Replacement Battery Cartridge	<a &gt;rbc48s<="" a="" href="/tripplite.eaton.com/Replacement-Battery-Cartridge-Select-48V-Tripp-Lite-SmartOnline-UPS-Systems~RBC48S"></a>
Battery Replacement Description	Hot-swappable, replaceable batteries
<b>VOLTAGE REGULATION</b>	
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)
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	
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)
<b>SURGE / NOISE SUPPRESSION</b>	
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
<b>PHYSICAL</b>	
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 ( <a href="//tripplite.eaton.com/2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM">2POSTRMKITWM</a> ); 2-4 post front rail rackmount ( <a href="//tripplite.eaton.com/Heavy-Duty-2-post-Front-Mounting-Ear-Kit~UPSHDEARKIT">UPSHDEARKIT</a> ); 4 post rackmount short-depth ( <a href="//tripplite.eaton.com/4-Post-1U-Universal-Adjustable-Rack-Mount-Shelf-Kit-for-Wall-Mount-Racks~4POSTRAILKITWM">4POSTRAILKITWM</a> ); Tower ( <a href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2-9USTAND</a> ); Wallmount ( <a href="//tripplite.eaton.com/2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM">2POSTRMKITWM</a> );
Minimum Required Rack Depth (cm)	58.42
Minimum Required Rack Depth (inches)	23
Minimum Required Rack Depth with External Battery Pack (cm)	67
Minimum Required Rack Depth with External Battery Pack (in.)	26.5
Minimum Required Rack Depth without External Battery Pack (cm)	58
Minimum Required Rack Depth without External Battery Pack (in.)	23
Optional Mounting Accessory Notes	Optional <a href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2-9USTAND</a> ; enables upright tower UPS placement; <a href="//tripplite.eaton.com/2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM">2POSTRMKITWM</a> ; enables wall-mount and 2-post rackmount installation; <a href="//tripplite.eaton.com/4-Post-1U-Universal-Adjustable-Rack-Mount-Shelf-Kit-for-Wall-Mount-Racks~4POSTRAILKITWM">4POSTRAILKITWM</a> ; enables installation in 4-post short-depth racks from 14.5 to 23.5 inches (368 to 597mm); <a href="//tripplite.eaton.com/Heavy-Duty-2-post-Front-Mounting-Ear-Kit~UPSHDEARKIT">UPSHDEARKIT</a> ; enables installation in 2 or 4-post racks using front vertical rails only, without rear support
Primary UPS Depth (mm)	496
Primary UPS Height (mm)	88
Primary UPS Width (mm)	438
Shipping Dimensions (hwd / in.)	9.45 x 22.24 x 27.56
Shipping Dimensions (hwd / cm)	24.00 x 56.49 x 70.00
Shipping Weight (lbs.)	64.00
Shipping Weight (kg)	29.03
UPS Housing Material	Metal
UPS Power Module Dimensions (hwd, cm)	8.79 x 43.79 x 49.61
UPS Power Module Dimensions (hwd, in.)	3.46 x 17.24 x 19.53
UPS Power Module Weight (kg)	23.11
UPS Power Module Weight (lbs.)	50.94
Unit Weight (lbs.)	50.9400
Unit Weight (kg)	23.11
<b>ENVIRONMENTAL</b>	
Operating Temperature Range	32° to 104°F (0° to 40°C)

Storage Temperature Range	5° to 122°F (-15° to 50°C)
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
Operating Elevation (m)	Up to 3000m
<b>COMMUNICATIONS</b>	
Network Management Cards	SNMPWEBCARD; <a href="https://tripplite.eaton.com/Web-Management-Accessory-Card~WEBCARDLX">WEBCARDLX</a>
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert Local software at <a href="https://www.tripplite.com/poweralert">https://www.tripplite.com/poweralert</a>
Communications Cable	USB and DB9 cabling included
WatchDog Compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications
Network Management Card Description	Network management card optional
Communications Interface	Contact closure; DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface; USB (HID enabled)
<b>LINE / BATTERY TRANSFER</b>	
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
<b>FEATURES &amp; SPECIFICATIONS</b>	
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 inverter bypass; Hot swappable batteries; Remote management; Surge/noise protection; Zero transfer time
Green Energy-Saving Features	High efficiency economy mode operation; Individually controllable load banks
Grounding Lug	Back panel grounding lug included
<b>STANDARDS &amp; COMPLIANCE</b>	
Product Certifications	CSA (Canada); UL 1778
Product Compliance	RoHS; SASO (Saudi Arabia); CE (Europe); EAC (Belarus, Kazakhstan, Russia); ENERGY STAR Qualified

WARRANTY & SUPPORT	
Product Warranty Period (Worldwide)	2-year limited warranty