SmartOnline 2000VA 1600W 208/230V Double-Conversion UPS - 5 Outlets, Network Card Option, LCD, USB, DB9, 1U Rack

MODEL NUMBER: **SUINT2000LCD1U**

Provides pure sine wave output and reliable battery backup to server and network equipment in just 1U of rack space.

Features

Double-Conversion UPS Protects Equipment Against Damage, Downtime and Data Loss
This 1U on-line double-conversion UPS system with battery-independent restart maintains perfect output by converting AC input to DC, then reconverting UPS output to fully regulated sine wave AC. Constant on-line operation completely isolates sensitive equipment from every power problem on the AC line. The SmartOnline® SUINT2000LCD1U provides the highest level of power protection and battery backup for servers, switches, phone systems, kiosks and professional A/V computer systems in IT applications where rack space is limited and a 1U UPS is desired.

Reliable, Expandable Battery Backup Keeps You Operational Through Power Outages
The field-replaceable, hot-swappable VRLA internal battery allows you to work through short power failures and give you enough time to safely save files and shut down your system in case of a prolonged blackout. Zero transfer time between on-line and battery modes maintains continuous operation of connected equipment without interruption or rebooting.

Optional LX Platform Network Management Card Allows Remote Access 24/7
The WEBCARDLXE network interface (sold separately) enables full remote configuration and management, including load shedding, reboots of connected equipment and safe shutdowns. The IP-based Auto Probe feature ensures continuous network uptime by communicating with other network devices, detecting lost connectivity and automatically rebooting IT equipment. Optional EnviroSense2 modules (E2MT, E2MTDO and E2MTHDI, all sold separately) provide a variety of environmental monitoring and control options.

C13 Outlets Protect Your Connected Components
Five C13 outlets provide connected equipment with pure sine wave AC output and allow you to monitor power consumption down to the outlet group level. Power provided by these outlets is filtered to protect connected equipment against damaging surges and line noise. The outlets are grouped into two individually controllable load banks that let you shed non-critical loads to extend runtime for critical loads.

Premium Protection from EMI/RFI Line Noise Helps Your Equipment Perform Better
This UPS system filters out disruptive electromagnetic and radio frequency interference that can inflict hardware damage or data loss. This EMI/RFI filtering also helps your connected components perform better and last longer.

Highlights

- Protects equipment against blackouts, brownouts, transient surges and line noise
- Keeps equipment running during outages to allow time for file saves and safe shutdown
- Zero transfer time between on-line and battery modes for uninterrupted operation
- Optional WEBCARDLXE network card enables full remote access and control
- Menu-driven LCD keeps you up to date with status info and other vital analytics

Package Includes

- 2000VA 1600W 208V Double-Conversion UPS
- USB cable
- DB9 cable
- Rack-mounting hardware
- Owner's manual

Clear LCD Interface Keeps You Informed at a Glance
The menu-driven front-panel LCD provides detailed settings, alarms and notifications to help diagnose any issues. It provides voltage, frequency, battery, load and other critical information. Audible alarms can be disabled through the front menu when the UPS goes to battery power. LEDs indicate AC output status and shutdown/fault condition.

Advanced Communications Ports Allow for Automatic Saves and Shutdowns
RS-232 and USB ports connect to a device for a variety of communication options (cables are included). A dry-contact relay port can be programmed through the LCD to provide reliable communications to automation and industrial components. The EPO/ROO port permits emergency shutdown or remote restart of all connected equipment.

Needs Only 1U of Rack Space for Installation
You can mount the SUINT2000LCD1U in just 1U of space in an EIA-standard 19-inch 4-post rack using the included hardware. The six-foot (1.8-meter) power cord with C14 plug connects to a compatible AC outlet. An internal fan helps keep the UPS cool in a crowded enclosure.

Specifications

OVERVIEW	
UPC Code	037332238153
UPS Type	On-Line

INPUT	
Input Phase	Single-Phase
Rated input current (Maximum Load)	7.7A
Nominal Input Voltage(s) Supported	208V AC; 220V AC; 230V AC; 240V AC
Nominal Input Voltage Description	230V factory default
UPS Input Connection Type	C14 inlet
Input Circuit Breakers	20A
UPS Input Cord Length (ft.)	6
UPS Input Cord Length (m)	1.8
Recommended Electrical Service	208V
Input Frequency	50 / 60 Hz
Power Factor (Input)	0.98 minimum (full load, nominal input voltage)
THDi	8% full load, 10% half load

OUTPUT	
Output Capacity (VA)	2000
Output Capacity (kVA)	2
Output Capacity (Watts)	1600
Output Capacity (kW)	1.6

Output Capacity Details	OVERLOAD CAPACITY: Supports inverter operation up to 105% load continuously, 106-115% load for 1 minute; 116-130% load for 12 seconds; 131-149% for 2 seconds and >150% load for 0 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	0.8
Crest Factor	3:1
Nominal Voltage Details	230V factory-default nominal voltage
Frequency Compatibility	50 / 60 Hz; Supports 50 to 60 Hz and 60 to 50 Hz conversion
Frequency Compatibility Details	ON LINE MODE: Output frequency is automatically configured to match nominal input frequency on startup; Output matches input frequency when +/-5Hz of nominal; Output is regulated to +/-0.05Hz when input frequency exceeds +/-5Hz of nominal. UPS switches to battery mode when input frequency is below 40Hz or above 70Hz. FREQUENCY REGULATION / CONVERSION MODE: Output is regulated to +/-0.05Hz of selected output frequency input is 40 to 70Hz; UPS switches to battery mode when input frequency is below 40Hz or above 70Hz. BATTERY MODE: Output is regulated to +/-0.05Hz.
Output Voltage Regulation (Line Mode)	+/- 3%
Output Voltage Regulation (Economy Line Mode)	+/- 10%
Output Voltage Regulation (Battery Mode)	+/- 3%
Included Output Power Cables	Includes 2 C13 to C14 power cables
Load Management Receptacles	Two switchable C13 outlet banks (Bank 1: 2 outlets / Bank 2: 3 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	(5) C13
Individually Controllable Load Banks	Yes

BATTERY	
Battery Type	Valve Regulated Lead Acid (VRLA)
Runtime Full Load (min.)	3 min. (1600W)
Runtime Half Load (min.)	10 min. (800W)
Expandable Runtime	No
DC System Voltage (VDC)	48
Battery Recharge Rate (Included Batteries)	Less than 8 hours recharge to 90% (typical, full load discharge)
Battery Replacement Description	Hot-swappable, user replaceable batteries. Part # RBC489-1U.

VOLTAGE REGULATION	
Voltage Regulation Description	Online, double-conversion power conditioning maintains 3% output voltage regulation during brownouts and overvoltages

USER INTERFACE, ALERTS & CONTROLS

Front Panel LCD Display	Front panel LCD information and configuration screen offers detailed UPS and site power status and operating data, plus configuration of voltage, frequency, operating mode, alarm function and a variety of additional options (see manual)
Switches	2 switches control off/on power status and alarm-cancel operation; 2 additional scroll-down and scroll-up / select options enable LCD status viewing and configuration options
Alarm Cancel Operation	Power-fail alarm can be temporarily silenced using alarm-cancel switch
Audible Alarm	Audible alarm indicates UPS startup, power-failure, low-battery, overload and UPS fault conditions
LED Indicators	Two front panel LEDs indicate AC Output status (green) and Shutdown / Fault condition (red)

SURGE / NOISE SUPPRESSION	
UPS AC Suppression Joule Rating	540
UPS AC Suppression Response Time	Instantaneous
EMI / RFI AC Noise Suppression	Yes
AC Suppression Joule Rating	540
AC Suppression Response Time	Instantaneous

PHYSICAL	
Primary Form Factor	Rackmount
Rack Height	1U
Cooling Method	Fan
Included Mounting Accessory Description	Includes 4 post rackmount installation accessories; Included mounting brackets support front-to-rear rail distances of 635 to 914mm
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount
Minimum Required Rack Depth (cm)	78.74
Minimum Required Rack Depth (inches)	31
Minimum Required Rack Depth without External Battery Pack (cm)	79
Minimum Required Rack Depth without External Battery Pack (in.)	30.95
Primary UPS Depth (mm)	710
Primary UPS Height (mm)	44
Primary UPS Width (mm)	440
Shipping Dimensions (hwd / in.)	6.10 x 22.83 x 32.68
Shipping Weight (lbs.)	52.91
Shipping Weight (kg)	24.00
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, in.)	1.73 x 17.32 x 27.950
UPS Power Module Weight (kg)	22.00

UPS Power Module Weight (lbs.)	48.5
Unit Dimensions (hwd / in.)	1.730 x 17.320 x 27.950
Unit Weight (lbs.)	48.500
Unit Weight (kg)	22.00

ENVIRONMENTAL	
Operating Temperature Range	32° to 104°F (0° to 40°C)
Storage Temperature Range	5° to 122°F (-15° to 50°C)
Relative Humidity	0% to 95%, non-condensing
AC Mode Efficiency Rating (100% Load)	90%
AC Economy Mode Efficiency Rating (100% Load)	98%
Online Mode Heat Dissipation (BTU/Hr) @ Full Load	674
Battery Mode Heat Dissipation (BTU/Hr) @ Full Load	888
Operating Elevation	0-3280 ft. (0-1000 m)
Audible Noise	65 dBA at 1m front side

COMMUNICATIONS	
Network Management Cards	WEBCARDLXE
Network Monitoring Port Description	Supports detailed monitoring of UPS and site power conditions
PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert software at https://tripplite.eaton.com/products/power-alert
Communications Cable	USB and RS232 cabling included
WatchDog Compatibility	Supports Watchdog application, OS and hard-reboot restart options for remote applications
Communications Interface	Contact closure; EPO (emergency power off); RS-232; Slot for SNMP/Web interface; USB (HID enabled)

LINE / BATTERY TRANSFER	
Transfer Time	Zero (0 milliseconds) in double-conversion mode; 4-7 milliseconds (AC to DC) / 4 milliseconds (DC to AC) economy mode

FEATURES & SPECIFICATIONS	
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 Details	Includes back panel grounding lug

APPLICATIONS	

UPS Applications	Mission Critical Applications

STANDARDS & COMPLIANCE	
Product Certifications	CSA (Canada); ICES (Canada); UL 1778
Product Compliance	CE (Europe); FCC Part 15 Class A (USA); RoHS

WARRANTY & SUPPORT	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	$250,000 Ultimate Lifetime Insurance
Extended Service Plans	**ADVANCED DEPOT EXCHANGE**Service Part Number: TL9SW5Y-2200UCParts, electronics and UPS batteries coverageNext business day shippingTechnical support**5-year onsite plan: TLWFLN75XX-2509UC**Onsite parts and labor coverage for 5 yearsParts, electronics and UPS batteries coverage24x7 onsite labor coverage, next-day responseNext-day shippingTechnical support