

## SmartOnline 208/120V UPS With Step-Down Transformer - On-Line Double-Conversion, 3000VA 2700W, 4U, Network Card Option

MODEL NUMBER: SU3000LCD2UHVTF



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

### Features

**2U Double-Conversion UPS Protects Equipment against Damage, Downtime and Data Loss** This 208V and 120V 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 both on-line and battery modes. Featuring a 2.7kW capacity, high 0.9 power factor, 570 joules of surge suppression, true on-line operation with pure sine wave output and zero transfer time in on-line double-conversion mode, the SmartOnline® SU3000LCD2UHVTF double-conversion UPS provides the highest level of AC power protection and battery backup for critical network closet, computer room and data center equipment. With the included 2U step-down transformer, this 3kVA UPS system can support both low- and high-voltage 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 four selectable strategies: Max Efficiency, Max Quality, Frequency Regulation and Auto Adaptive, which automatically offers increased efficiency when utility power conditions are good and enhanced power quality when power conditions are poor.

**Individually Controllable Load Banks Let You Access and Control Outlets Remotely** The UPS and transformer combined feature 20 outlets in total—12 unswitched NEMA 5-15/20R on the transformer, six NEMA 6-15/20R on the UPS and one unswitched NEMA L6-20R on each. Four NEMA 6-15/20R outlets are split into two switchable load banks, allowing you to reboot select components or shed loads remotely.

**Reliable, Expandable Battery Backup Keeps You Operational Through Power Outages** The field-replaceable, hot-swappable internal battery provides 13.5 minutes of support at half load (1350W) and five minutes at full load (2700W), 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 BP72V18-2US (sold separately). Both the internal batteries and sensor-enabled external battery packs are automatically sensed and configured during installation and replacement to offer accurate remaining runtime during outages and battery-age notifications. The intelligent battery management system with temperature-compensated charging extends battery life.

**Automatic Bypass Maintains Utility Output During Fault Conditions** Auto-bypass mode keeps

### Highlights

- Offers protected 208V and 120V network-grade output power for critical IT applications
- Zero transfer time between on-line and battery modes for uninterrupted operation
- UPS + step-down transformer offer power protection of both 208V and 120V network devices
- Optional external battery packs provide additional runtime for extended-run applications
- Optional WEBCARDLX network interface required to use Auto Probe feature

### 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

- SU3000LCD2UHVTF 2U SmartOnline Double-Conversion UPS
- SU5000XFMRT2U20 2U 208V to 120V Step-Down Isolation Transformer
- USB cable
- DB9 cable
- EPO cable
- Rack-mounting hardware
- Owner’s manual

connected equipment powered and operational, even during UPS fault conditions.

**Automatically Turns Back On When 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** An accessory slot accommodates the optional Java-free HTML5-based WEBCARDLX (sold separately) that enables full remote access for site power and UPS status monitoring, configuration, control and email notifications via secure web browser, SNMP, telnet or SSH. It supports 10/100 Mbps auto-sensing for optimum communication with an Ethernet network. Automated alerts help prevent accidental overloads, power loss and downtime. WEBCARDLX 15.5.2 or later is required to use the Auto Probe feature, which can prevent costly service calls by automatically rebooting non-responsive network devices.

**Versatile Installation Options in Your Data Center or Network Closet** Hardware is included for mounting the UPS system and transformer in 4U of space in an EIA-standard 19-inch 4-post rack. Use two optional 2POSTRMKITWM kits for 2-post rack mounting or the optional 2-9USTAND for mounting in an upright tower position (both accessories sold separately). The 10-ft. (3.05 m) input power cord with NEMA L6-20P plug connects to any compatible AC outlet.

## Specifications

OVERVIEW	
UPC Code	037332241719
UPS Type	On-Line
INPUT	
Input Phase	Single-Phase
Rated input current (Maximum Load)	14.97A
Nominal Input Voltage(s) Supported	208V AC
UPS Input Connection Type	L6-20P
UPS Input Cord Length (ft.)	10
UPS Input Cord Length (m)	3.1
Recommended Electrical Service	208V 20A
OUTPUT	
Output Capacity (VA)	3000
Output Capacity (kVA)	3

Output Capacity (Watts)	2700
Output Capacity (kW)	2.7
Output Capacity Details	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 Voltage Details	IMPORTANT! Please ensure the UPS is configured for 208V output when used with the included step-down transformer module
Frequency Compatibility	60 Hz
Frequency Compatibility Details	IMPORTANT! Please ensure the UPS is configured for 60Hz output when used with the included step-down transformer module
Output Voltage Regulation (Line Mode)	+/- 2%
Output Voltage Regulation (Economy Line Mode)	+/- 10%
Output Voltage Regulation (Battery Mode)	+/- 2%
Load Management Receptacles	Two switchable outlet load banks (2 NEMA 6-15/20R outlets per bank)
Output Circuit Breakers	Included 2U transformer module includes four 20A 120V circuit breakers (each protects 3 NEMA 5-15/20R outlets).
Output AC Waveform (AC Mode)	Pure Sine wave
Output AC Waveform (Battery Mode)	Pure Sine wave
Nominal Output Voltage(s) Supported	120V; 208V
Output Receptacles	(12) 5-15/20R; (6) 6-15/20R; (2) L6-20R
Individually Controllable Load Banks	Yes
<b>BATTERY</b>	
Battery Type	Valve Regulated Lead Acid (VRLA)
Runtime Full Load (min.)	5 min. (2700W)
Runtime Half Load (min.)	13.5 min. (1350W)
Expandable Runtime	Yes
External Battery Pack Compatibility	&nbsp;<a class="productLink" href="//triplite.eaton.com/External-72V-2U-RackTower-Battery-Pack-for-Select-Tripp-Lite-UPS-Systems~BP72V15-2U">BP72V15-2U</a>&nbsp; (limit 1); &nbsp;<a class="productLink" href="//triplite.eaton.com/External-72V-3U-Rack-Tower-Battery-Pack-Select-Tripp-Lite-UPS-systems~BP72V28RT-3U">BP72V28RT-3U</a>&nbsp; (multi-pack compatible); &nbsp;<a class="productLink" href="//triplite.eaton.com/External-72V-2U-Rack-Tower-Battery-Pack-for-Tripp-Lite-UPS-Systems~BP72V18-2US">BP72V18-2US</a>&nbsp; (multi-pack compatible)
DC System Voltage (VDC)	72
Battery Recharge Rate (Included Batteries)	3.0 hours from 10% to 90% (typical, full load discharge)
Battery Access	Front panel battery access door

Internal UPS Replacement Battery Cartridge	&nbsp;<a class="productLink" href="//tripplite.eaton.com/Replacement-Battery-Cartridge-72V-Tripp-Lite-SmartOnline-UPS-Systems~RBC72S">RBC72S</a>&nbsp;</td>
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 288
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	570
AC Suppression Response Time	Instantaneous
<b>PHYSICAL</b>	
Primary Form Factor	Rackmount
Rack Height	4U
Cooling Method	Fan
Included Mounting Accessory Description	4 post installation accessories included (2 sets)
Installation Form Factors Supported with Included Accessories	4 post 19 inch rackmount
Installation Form Factors Supported with Optional Accessories	2 post rackmount (&nbsp;<a class="productLink" href="//tripplite.eaton.com/2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM">2POSTRMKITWM</a>&nbsp;</td>; Tower (&nbsp;<a class="productLink" href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2-9USTAND</a>&nbsp;</td>)
Minimum Required Rack Depth (cm)	71.12
Minimum Required Rack Depth (inches)	28
Minimum Required Rack Depth with External Battery Pack (cm)	77
Minimum Required Rack Depth with External Battery Pack (in.)	30.25

Minimum Required Rack Depth without External Battery Pack (cm)	74
Minimum Required Rack Depth without External Battery Pack (in.)	29.25
Optional Mounting Accessory Notes	Quantity two &nbsp;<a class="productLink" href="//tripplite.eaton.com/2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM">2POSTRMKITWM</a>&nbsp;&nbsp;&nbsp; accessories are required for 2 post rackmount installation; Quantity one &nbsp;<a class="productLink" href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2-9USTAND</a>&nbsp;&nbsp;&nbsp; accessory required for upright tower installation
Primary UPS Depth (mm)	616
Primary UPS Height (mm)	177
Primary UPS Width (mm)	440
Shipping Dimensions (hwd / in.)	37.75 x 40.00 x 48.00
Shipping Weight (kg)	87.09
UPS Housing Material	Metal
UPS Power Module Dimensions (hwd, in.)	6.96 x 17.34 x 24.25
UPS Power Module Weight (kg)	60.70
UPS Power Module Weight (lbs.)	133.82
Unit Weight (lbs.)	133.820
Unit Weight (kg)	60.70
<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)	933
AC Economy Mode BTU / Hr. (Full Load)	588
Battery Mode BTU / Hr. (Full Load)	1399
AC Mode Efficiency Rating (100% Load)	>90%
AC Economy Mode Efficiency Rating (100% Load)	>95%
Audible Noise	<50dB at front side 1M
<b>COMMUNICATIONS</b>	
Network Management Cards	SNMPWEBCARD; &nbsp;<a class="productLink" href="//tripplite.eaton.com/Web-Management-Accessory-Card~WEBCARDLX">WEBCARDLX</a>&nbsp;&nbsp;&nbsp;
Network Monitoring Port Description	Supports detailed monitoring of UPS and site power conditions; DB9 port supports RS232 plus assignable contact closure pin functions for On-battery, On bypass, Output-on and Low-battery conditions and remote Shutdown, Output-off, Reboot and Power-toggle operations

PowerAlert Software	For local monitoring via the UPS's built-in communication ports, download PowerAlert software at <a href="https://tripplite.eaton.com/products/power-alert">https://tripplite.eaton.com/products/power-alert</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; 4 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); NOM (Mexico); UL 1778
Product Compliance	RoHS; FCC Part 15 Class A (USA)
<b>WARRANTY &amp; SUPPORT</b>	
Product Warranty Period (Worldwide)	2-year limited warranty
Connected Equipment Insurance (U.S., Canada & Puerto Rico)	\$250,000 &nbsp;<a class="insuranceLink" href="//tripplite.eaton.com/support/insurance-policy">Ultimate Lifetime Insurance</a> &nbsp;