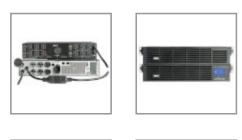# SmartOnline 208/120V UPS With Step-Down Transformer - On-Line Double-Conversion, 3000VA 2700W, 4U, Network Card Option

## 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 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 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 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 WEBCARDLXE Network Interface Offers 24/7 Access**An accessory slot accommodates the optional Java-free HTML5-based WEBCARDLXE (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. WEBCARDLXE 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 |

| | |
|---|---|
| **BATTERY** | |
| 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 |  <a class="productLink" href="//tripplite.eaton.com/External-72V-2U-Rack-Tower-Battery-Pack-for-Tripp-Lite-UPS-Systems~BP72V18-2US">BP72V18-2US</a>  (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 |  <a class="productLink" href="//tripplite.eaton.com/Replacement-Battery-Cartridge-72V-Tripp-Lite-SmartOnline-UPS-Systems~RBC72S">RBC72S</a>  |
| Battery Replacement Description | Hot-swappable, replaceable batteries |

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| **VOLTAGE REGULATION** | |
| 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) |

| **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 | 570 |
| AC Suppression Response Time | Instantaneous |

| **PHYSICAL** | |
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| 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 ( <a class="productLink" href="//tripplite.eaton.com/2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM">2POSTRMKITWM</a> ); Tower ( <a class="productLink" href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2-9USTAND</a> ) |
| 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  <a class="productLink" href="//tripplite.eaton.com/2-Post-Rack-Mount-Wall-Mount-Adapter-Kit-select-Rack-Mount-UPS-Systems~2POSTRMKITWM">2POSTRMKITWM</a>  accessories are required for 2 post rackmount installation; Quantity one  <a class="productLink" href="//tripplite.eaton.com/2U-9U-Tower-Stand-Kit-select-Rack-Mount-UPS-Systems~2-9USTAND">2-9USTAND</a>  accessory required for upright tower installation |

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|---|---|
| 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 Dimensions (hwd / in.) | 6.960 x 17.320 x 24.250 |
| Unit Weight (lbs.) | 133.820 |
| Unit Weight (kg) | 60.70 |

| 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 | 5 to 95%, non-condensing |
| AC Mode BTU / Hr. (Full Load) | 933 |
| AC Economy Mode BTU / Hr. (Full Load) | 588 |
| AC Mode Efficiency Rating (100% Load) | >90% |
| AC Economy Mode Efficiency Rating (100% Load) | >95% |
| Online Mode Heat Dissipation (BTU/Hr) @ Full Load | 933 |
| Battery Mode Heat Dissipation (BTU/Hr) @ Full Load | 1399 |
| Audible Noise | <50dB at front side 1M |

| COMMUNICATIONS | |
|---|---|
| Network Management Cards |  <a class="productLink" href="//tripplite.eaton.com/Network-Card-Eaton-Tripp-Lite-Series-UPS-Systems~WEBCARDLXE">WEBCARDLXE</a>  |
| 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 https://tripplite.eaton.com/products/power-alert |
| 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) |
|---|---|

**LINE / BATTERY TRANSFER**

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| 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 |

**FEATURES & SPECIFICATIONS**

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|---|---|
| Cold Start (Startup in Battery Mode During a Power Failure) | Cold-start operation supported |
| High Availability UPS Features | Automatic inverter bypass; Hot swappable batteries; Remote management; Surge/noise protection; Zero transfer time; Auto Probe Monitoring (requires WEBCARDLXE) |
| Green Energy-Saving Features | High efficiency economy mode operation; Individually controllable load banks |
| Grounding Details | Back panel grounding lug included |

**APPLICATIONS**

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|---|---|
| UPS Applications | High-End Desktop/Small Network |

**STANDARDS & COMPLIANCE**

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| Product Certifications | CSA (Canada); NOM (Mexico); UL 1778 |
| Product Compliance | RoHS; FCC Part 15 Class A (USA) |

**WARRANTY & SUPPORT**

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| Product Warranty Period (Worldwide) | 2-year limited warranty |
| Connected Equipment Insurance (U.S., Canada & Puerto Rico) | $250,000 <a class="insuranceLink" href="//tripplite.eaton.com/support/insurance-policy">Ultimate Lifetime Insurance</a>  |