# SmartOnline S3MX Series 3-Phase 380/400/415V 80kVA 72kW On-Line Double-Conversion UPS, Parallel for Capacity and Redundancy, Single & Dual AC Input

MODEL NUMBER: **S3M80KXD**



Highly efficient 94% on-line UPS with compact design protects mission-critical equipment against downtime due to power disturbances.

## Features

**Battery Backup and VFI Operation Protect Critical Loads**The SmartOnline® S3M80KXD IGBT UPS supports the continuous availability of your most important loads through all power conditions, providing a compact backup power platform that's easy to manage and inexpensive to operate. Sophisticated voltage and frequency independent (VFI) operation and advanced IGBT rectifier technology with DSP control deliver reliable output power quality. Providing up to 80kVA of clean, continuous power, this 3-phase UPS system is perfect for critical applications in IT, communications, corporate, commercial, retail, financial, security, transportation, emergency and edge infrastructure environments.

**Best-in-Class Footprint for Easy Integration into Your Network Application**This on-line double-conversion UPS system has a very small footprint of just 0.28 square meters. It requires less valuable space in your facility, and you can install the UPS system in spaces that would previously have required expensive retrofitting.

**Efficient Operation and Design Reduces Cost of Ownership**This UPS benefits from highly efficient transformer-free double-conversion technology that delivers operating cost savings. It achieves 94% efficiency in double-conversion mode and up to 98% in ECO mode, reducing your power and cooling costs. A low THDi (<3%) improves generator compatibility. A low THDv (2%) and active power factor correction improve output performance. The hardware and firmware platform design reduces the number of unique boards, improving mean time to repair (MTTR) and resulting in reduced downtime. Built-in static and maintenance bypass transfer UPS load to utility power during faults, overloads and maintenance, which also avoids costly system downtime.

**External Batteries Supply Reliable Backup with Expandable Runtime Options**The S3M80KXD uses external scalable battery cabinets, such as BP480V65 and BP480V100 (sold separately), to provide up to three hours of backup support in case of a power failure. The UPS system automatically restarts after a lengthy power outage.

**Intuitive LCD Interface Delivers Important Performance Information at a Glance**The interactive front-panel LCD interface displays critical operating conditions and diagnostic data, including operating mode, input/output voltage, load, battery voltage, backup runtime and fault conditions. Four LEDs provide information about line, bypass, battery and fault status.

## Highlights

- Best-in-class footprint and power density minimize space requirements for up to 80kVA
- Intuitive LCD interface offers key performance, configuration and diagnostics info
- High efficiency (94% on-line, 98% ECO mode) helps reduce operating costs
- Add optional WEBCARDLX with latest version of PADM20 for enhanced remote management
- Parallel for capacity and redundancy up to 3 units
- Single and dual AC input capability

## Applications

- Save space in tight data center environments with best-in-class small footprint
- Back up essential equipment in network, telecom, financial and edge infrastructure applications
- Maintain critical data-center, automation-system and production-line operations during all power conditions

## Package Includes

- S3M80KXD SmartOnline S3MX Series 3-Phase 380/400/415V 80kVA 72kW On-Line Double-Conversion UPS
- RS-232 cable
- Paralleling cable kit
- Owner's manual

**Network Management Card Offers Remote Monitoring and Control**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.

**Parallel Capability Provides Additional Capacity**Connect up to three S3M80KXD units in parallel using separate/shared battery cabinets for increased capacity or redundancy

**2-Year Warranty Provides Peace of Mind**The S3M80KXD is backed by a 2-year warranty, ensuring reliability and performance.

# Specifications

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| **OVERVIEW** | |
| UPC Code | 037332239822 |
| UPS Type | On-Line |
| **INPUT** | |
| Input Phase | 3-Phase |
| Rated input current (Maximum Load) | 122.2A |
| Nominal Input Voltage(s) Supported | 220/380V 3-PH Wye; 230/400V 3-PH Wye; 240/415V 3-PH Wye |
| Nominal Input Voltage Description | 3-Phase Wye, 4 wire plus ground (L1, L2, L3, N, G) |
| UPS Input Connection Type | Hardwire |
| Input Circuit Breakers | 6 x 30A fuses/Phase |
| Power Factor (Input) | .99PF (100% load) |
| THDi | <3% (100% load) |
| **OUTPUT** | |
| Output Capacity (VA) | 80000 |
| Output Capacity (kVA) | 80 |
| Output Capacity (Watts) | 72000 |
| Output Capacity (kW) | 72.00 |
| Output Capacity Details | Supports up to 100% load continuously in double conversion mode; Supports 100-110% load for 10 minutes, 110 to 130% load for 1 minute and greater than 130% for 1 second before switching to bypass mode; Inverter mode is automatically restored as load levels are reduced to less than 70%;  Configuration options support up to 3 S3M30KX systems wired in parallel for increased capacity or fault-tolerant, redundant operation |
| Power Factor | 0.9 |
| Crest Factor | 3:1 |
| Frequency Compatibility | 50 / 60 Hz; Supports 50 to 60 Hz and 60 to 50 Hz conversion |
| Frequency Compatibility Details | Automatic frequency selection |
| Output Voltage Regulation (Line Mode) | +/- 1% |

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| Output Voltage Regulation (Economy Line Mode) | +/-11V of nominal |
| Output Voltage Regulation (Battery Mode) | +/- 1% |
| Output AC Waveform (AC Mode) | Pure Sine wave |
| Output AC Waveform (Battery Mode) | Pure Sine wave |
| Nominal Output Voltage(s) Supported | 220/380V 3-PH Wye; 230/400V 3-PH Wye; 240/415V 3-PH Wye |
| Output Receptacles | Hardwire |
| Individually Controllable Load Banks | No |
| **BATTERY** | |
| Expandable Runtime | Yes |
| External Battery Pack Compatibility | BP480V100;  <a class="productLink" href="//tripplite.eaton.com/external-ups-battery-pack-40-100-Ah-no-battery~BP480V100-NIB">BP480V100-NIB</a> ; BP480V40;  <a class="productLink" href="//tripplite.eaton.com/external-ups-battery-pack-40-40-Ah-no-battery~BP480V40-NIB">BP480V40-NIB</a> ; BP480V65 |
| DC System Voltage (VDC) | +/- 240 |
| Battery Recharge Rate (Included Batteries) | 9 hours to 90% (Internal batteries) |
| **VOLTAGE REGULATION** | |
| Voltage Regulation Description | Online, double-conversion power conditioning maintains output within 1% of the selected nominal voltage in online mode |
| **USER INTERFACE, ALERTS & CONTROLS** | |
| Front Panel LCD Display | LCD DISPLAY: offers a variety of graphical, text and numeric information to indicate a wide range of UPS operation and fault / warning conditions, including current operating mode, alarm status, load level, battery charge, input / output voltage & frequency, estimated runtime and more (see user manual for a detailed listing) |
| Switches | ON / ENTER BUTTON: turns the UPS on and confirms a selection from the settings menu; OFF / ESC BUTTON: turns off the UPS and returns to the previous item in the settings menu; TEST / UP BUTTON: initiates UPS self-test operation and advances to the next item in the settings menu; MUTE / DOWN BUTTON: silences the audible alarm and advances to the previous item in the settings menu; Press TEST/UP & MUTE/DOWN buttons simultaneously for 1 second to enter or exit the settings menu (See user manual for detailed information) |
| Audible Alarm | Alarms warn users of a variety of operational conditions: BYPASS MODE (beeps every 2 seconds), BATTERY MODE (beeps every 4 seconds), FAULT MODE (beeps continuously), OVERLOAD (beeps twice per second), OTHER WARNINGS (beeps once per second), FAULT (beeps continuously); All alarms can be silenced, except OVERLOAD & OTHER WARNINGS conditions |
| LED Indicators | 4 LEDs report BYPASS / LINE / BATTERY / FAULT modes |
| **PHYSICAL** | |
| Primary Form Factor | Tower |
| Cooling Method | Fans |
| Installation Form Factors Supported with Included Accessories | Tower |
| Primary UPS Depth (mm) | 790 |
| Primary UPS Height (mm) | 1,010 |

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| Primary UPS Width (mm) | 360 |
| Shipping Dimensions (hwd / in.) | 47.24 x 18.89 x 35.82 |
| Shipping Weight (kg) | 134.72 |
| UPS Housing Material | Steel |
| UPS Power Module Dimensions (Height x Width x Depth, mm) | 1010 x 360x 790 |
| UPS Power Module Dimensions (hwd, in.) | 39.76 x 14.17 x 31.10 |
| UPS Power Module Weight (kg) | 112.94 |
| UPS Power Module Weight (lbs.) | 249 |
| **ENVIRONMENTAL** | |
| Operating Temperature Range | 0 to +40C (32-104F) |
| Storage Temperature Range | 0 to +35C (32 to 95F) with battery;  -15 to 60C (5 to +140F) without battery |
| Relative Humidity | 5 to 95%, non-condensing |
| Operating Elevation | < 3280ft (Capacity de-rates by 1% for every 328ft over 3280ft ) |
| Audible Noise | <75BA at 1meter |
| **COMMUNICATIONS** | |
| Network Management Cards | WEBCARDLX;  <a class="productLink" href="//tripplite.eaton.com/Programmable-RS-485-Management-Accessory-Card-for-Select-3-Phase-UPS-Systems~MODBUSCARDSV">MODBUSCARDSV</a> ; RELAYCARDSV |
| Network Monitoring Port Description | Card accessory slot supports network management interface or programmable I/O relay card options |
| Communications Cable | DB9/RS-232 cable included |
| Communications Interface | DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface |
| **LINE / BATTERY TRANSFER** | |
| Transfer Time | Zero transfer time Online to Battery, Inverter to Bypass 0ms (Synchronous), and Inverter to ECO mode < 10ms. |
| Low Voltage Transfer to Battery Power (Setpoint) | 120V(Ph-N), 208V (Ph-Ph)  @ 50% load  /  176V (Ph-N), 305V (Ph-Ph)  @ 100% load. |
| High Voltage Transfer to Battery Power (Setpoint) | 276 (Ph-N), 478V (Ph-Ph) @ 50% or 100% load. |
| **FEATURES & SPECIFICATIONS** | |
| Cold Start (Startup in Battery Mode During a Power Failure) | Cold-start operation supported |
| High Availability UPS Features | Automatic inverter bypass; Manual bypass switch; Auto Probe Monitoring (requires WEBCARDLX); Zero transfer time; On-Line/Double-Conversion |
| Green Energy-Saving Features | High efficiency economy mode operation |
| Grounding Details | Yes |
| IP68 Rated | No |
| IP20 Rated | No |

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| **APPLICATIONS** | |
| UPS Applications | Mission Critical Applications |
| **STANDARDS & COMPLIANCE** | |
| Product Certifications | IEC/EN 62040 |
| Product Compliance | RoHS; CE (Europe); UKCA |
| **WARRANTY & SUPPORT** | |
| Product Warranty Period (U.S. & Canada) | 2-year limited warranty |
| Product Warranty Period (International) | 2-year limited warranty |
| Product Warranty Period (Mexico) | 2-year limited warranty |
| Product Warranty Period (Puerto Rico) | 2-year limited warranty |
| 3-Phase Warranty Statement | Tripp Lite 3-Phase UPS Factory Warranty |

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