

# 3-Phase 208/220/120/127V 15kVA/kW Double-Conversion UPS - Unity PF, 2 Internal Battery Strings

MODEL NUMBER: S3M15K2B











On-line UPS supports the continuous availability of critical loads in a compact footprint without compromising runtime, reliability or functionality.

#### **Features**

#### **Battery Backup and VFI Operation Protect Critical Loads**

The SmartOnline® S3M15K2B IGBT UPS supports the continuous availability of your most important operational and IT equipment 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 15kVA/kW of clean, continuous power, this 3-phase UPS system is ideally suited for critical applications in banking, education, healthcare, government and manufacturing sectors

#### Best-in-Class Footprint for Easy Integration into Your Network Application

The UPS market's smallest footprint for 3-phase 208V systems lets you install the S3M15K2B in spaces that would otherwise have required expensive retrofitting. By achieving its compact size without compromising runtime, reliability or functionality, the S3M15K2B is recommended for data centers, colocation facilities and edge computing environments that require high efficiency, high performance and clean, reliable power protection, while preserving as much space as possible for revenue-generating server racks.

# Efficient Operation and Design Reduces Cost of Ownership

ENERGY STAR 2.0-certified technology provides high operational efficiency to save on utility and cooling costs, as well as protect the environment. This UPS achieves up to 94% efficiency in double-conversion mode and up to 98% in ECO mode, reducing your power and cooling costs. Unity output power factor (1.0) lets you support more equipment. A low THDi (<2%) improves generator compatibility. A low THDv (1%) and active power factor correction with DSP control 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. Automatic and maintenance bypass transfer UPS load to utility power during faults, overloads and maintenance, which also avoids costly system downtime.

## Supplies Reliable Battery Backup with Expandable Runtime Options

Two internal battery modules provide 13 minutes of support at half load and six minutes at full load with zero transfer time. Adding external battery cabinets, such as BP24V09K and BP240V09 (sold separately), provides extended runtime and supports critical loads uninterrupted during successive utility network

## **Highlights**

- Best-in-class footprint saves space in server room for revenue-generating equipment
- ENERGY STAR 2.0-certified efficiency up to 98% ECO, and up to 94% Online mode helps reduce utility and cooling costs
- Unity output power factor (1.0) allows support of more equipment without overloading
- Optional WEBCARDLXMINI network card allows costeffective remote management 24/7
- Parallel capability provides increased capacity and redundancy up to 4 units

# **Applications**

- Fit 15kVA/kW UPS and batteries in best-in-class footprint to save space for revenue-generating equipment
- Back up critical IT equipment and data in network, telecom, financial and light industrial applications
- Maintain server-room operations during all power conditions, including short blackouts

#### **Package Includes**

- S3M15K2B, 3-Phase 208/220/120/127V 15kVA/kW Double-Conversion UPS
- RS-232 Cable (Male/Female), 5 ft. (1.5 m)
- Parallel Cable (Male/Female), 5 ft. (1.5 m)
- USB Cable, 5 ft. (1.5 m)
- Battery Cable Anderson Connectors Set to Terminate a Battery Cable (2 Black, 2 White, 2 Red and several metal terminals)
- Cable Glands (x6) for Cable Landing Box (waterproof fasteners)
- Dry Contact Connector (Green)
- Owner's Manual



outages. A one-touch cold-start button powers up the UPS with battery power only.

#### Intuitive LCD Interface Delivers Important Performance Information at a Glance

The large five-inch touchscreen LCD panel displays critical operating conditions and diagnostic data, including battery and load status. Four LEDs provide information about AC, bypass, battery and fault status.

## Remote Network Monitoring and Control Available 24 Hours a Day

The optional Java-free WEBCARDLXMINI network management card (sold separately) enables remote management through embedded HTML5 web, SSH/telnet and SNMP interfaces, as well as integration with a wide range of network management systems and DCIM platforms. WEBCARDLXMINI also supports EnviroSense2 (sold separately), which monitors temperature, humidity and other environmental factors. Three MODBUS ports (RS-485, USB, RS-232) may also be used to monitor and manage the UPS. A Remote Emergency Power Off (REPO) port allows shutdown from a safe distance during emergencies.

#### **Parallel Capability Provides Additional Capacity**

Connect up to four S3M15K2B units in parallel using separate/shared battery cabinets for 60kVA maximum capacity or N+N fault tolerance redundancy.

# **Specifications**

OVERVIEW		
UPC Code	037332247803	
UPS Type	On-Line	
INPUT		
Input Phase	3-Phase	
Rated input current (Maximum Load)	53.8A (120/208V); 50.8A (127/220V)	
Nominal Input Voltage(s) Supported	120/208V 3-PH Wye; 127/220V 3-PH Wye	
Nominal Input Voltage Description	3-Phase Wye, 4 wire (L1, L2, L3, N, G)	
UPS Input Connection Type	Hardwire	
Input Circuit Breakers	63A 3 pole magnetic breaker	
Power Factor (Input)	>0.99 (maximum resistive load)	
THDi	< 2% (100% load),	
ОИТРИТ		
Output Capacity (VA)	15000	
Output Capacity (kVA)	15	
Output Capacity (Watts)	15000	
Output Capacity (kW)	15	
Output Capacity Details	Supports parallel connection of up to 4 S3M15K2B systems for 60kVA max capacity or N+N fault tolerance redundancy; Supports up to 100% load continuously, 110% load for 60 minutes, 125% load for up to 10 minutes, 150% load for up to 1 minute and over 150% transfers to bypass mode; Automatic inverter restart is available when the load level recovers to 95% or less after overload-related transfer to bypass	



±120 VDC  Up to 8 hours to 90%; Battery charge current adjustable from 1 to 20A (2.7A factory default)  Lifespan depends on ambient temperature, and battery maintenance  Online, double-conversion power conditioning maintains ±1% output voltage regulation  Maintains continuous operation without using battery power during overvoltages up to 275 VAC  Maintains continuous operation without using battery power during brownout/undervoltage conditions to 125Vac
Up to 8 hours to 90%; Battery charge current adjustable from 1 to 20A (2.7A factory default)  Lifespan depends on ambient temperature, and battery maintenance  Online, double-conversion power conditioning maintains ±1% output voltage regulation
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±120 VDC
<a class="productLink" href="//tripplite.eaton.com/external-240v-battery-cabinet-only-s3m10k-20k-series-208v-3-phase-ups-systems~BP240V09-NIB">BP240V09-NIB</a> ; <a class="productLink" href="//tripplite.eaton.com/external-240v-battery-cabinet-s3m10k-20k-s3m-series-208v-3-phase-ups-systems~BP240V09K">BP240V09K</a>
External battery pack cabling supplied by contractor or installer
Yes
13 min. (7.5kW)
6 min. (15kW)
No
Hardwire
120/208V 3-PH Wye; 127/220V 3-PH Wye
Pure Sine wave
Pure Sine wave
63A 3 pole magnetic breaker
±1%
±10%
±1%
Auto-selectable frequency configuration
50 / 60 Hz
Factory default output voltage is 120/208V; Less than 1% THDi (full load resistive); Less than 0.2V Max DC Offset; Less than ±1° Max Phase Angle Deviation; Less than ± 3% Max Voltage Unbalance Deviation
3:1



Front Panel LCD Display	Large touchscreen color LCD display (5in/ 12.7cm) enables comprehensive local monitoring, diagnostics and control through an advanced, intuitive and user-friendly interface. The display has seven sub-screens: HOME, STATUS, ALARM, SETTING, MAINT, COMMON and ABOUT. Each of these screens is intuitive and comprehensive providing specifics from voltages, frequencies, battery charge status, system operating mode (online, standby, ECO, Battery, fault) status, specific measurement in every operating mode, current and event history to enable diagnostics and system fault troubleshooting. It is powerful local management tool at your fingertips. LCD supports English, Spanish and French.
Switches	POWER button turns UPS system on and off; EPO (Emergency Power Off) button turns UPS output off and disables Bypass output, and Cold Start Button turns UPS on with batteries in battery mode.
Alarm Cancel Operation	Alarm can be silenced in sub-screen ALARM by muting the buzzer.
Audible Alarm	Alarms signal a variety of operational conditions: low-battery, overload, shutdown, bypass and more
LED Indicators	Four LEDs indicate AC mode (Green), Bypass (Yellow), Battery (Yellow) and Fault (Red) modes
SURGE / NOISE SUPPRESSION	
EMI / RFI AC Noise Suppression	Yes
AC Suppression Response Time	Instantaneous
PHYSICAL	
Primary Form Factor	Tower
Cooling Method	Fans
Installation Form Factors Supported with Included Accessories	Tower
Primary UPS Depth (mm)	900
Primary UPS Height (mm)	868
Primary UPS Width (mm)	250
Shipping Dimensions (hwd / in.)	41.61 x 14.37 x 39.92
Shipping Weight (kg)	213.19
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, in.)	34.17 x 9.84 x 35.43
Unit Dimensions (hwd / in.)	34.170 x 9.840 x 35.430
Unit Weight (lbs.)	414
Unit Weight (kg)	187.79
ENVIRONMENTAL	
Operating Temperature Range	32° to 104°F (0° to 40°C)
Storage Temperature Range	32° to 95° F (0° to 35°C) (with batteries installed) 5° to 140° F (-15° to 60°C) (without batteries)
Relative Humidity	Up to 95%, non-condensing
AC Mode BTU / Hr. (Full Load)	2457
AC Economy Mode BTU / Hr. (Full Load)	450



AC Mode Efficiency Rating (100% Load)	93%
AC Economy Mode Efficiency Rating (100% Load)	97.3%
Operating Elevation (ft.)	0 to 3280 feet, but derates 1% per 328 ft above 3280 ft
Audible Noise	Less than 58dBA at 1m
Operating Elevation (m)	0 to 1000m, but derates 1% per 100 m above 1000 m
COMMUNICATIONS	
Network Management Cards	WEBCARDLX; <a class="productLink" href="//tripplite.eaton.com/network-interface-card-for-select-tripp-lite-ups-systems~WEBCARDLXMINI">WEBCARDLXMINI</a>
Network Monitoring Port Description	Additional built-in set of INPUT and OUTPUT contacts support remote notification of Online Mode operation, Battery Mode operation, Bypass Mode operation, Abnormal Bypass Mode Source, Battery Test Failure and Low Battery conditions
PowerAlert Software	Available via free download from https://tripplite.eaton.com/products/power-alert
Communications Cable	DB9 (RS-232) cabling included USB cable Paralleling UPS cable
Communications Interface	DB9 Serial; EPO (emergency power off); RS-232; Slot for SNMP/Web interface; USB-B
LINE / BATTERY TRANSFER	
Transfer Time	Online mode: No transfer time (0 ms.); (AC to battery, and Inverter to Bypass , 0 ms)
Low Voltage Transfer to Battery Power (Setpoint)	Maintains continuous operation without using battery power during brownout/undervoltage conditions down to 125VAC (at <50% load). Below this point, output is maintained utilizing reserve battery power
High Voltage Transfer to Battery Power (Setpoint)	Maintains continuous operation without using battery power during overvoltages to 275VAC. Above this point, output is maintained utilizing reserve battery power
FEATURES & SPECIFICATIONS	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-Start dedicated button on the back of the UPS
High Availability UPS Features	Auto Probe Monitoring and Reboot (requires WEBCARDLXMINI); Automatic inverter bypass; Manual bypass switch; On-Line/Double-Conversion; On-Line (VFI) Operation; Pure sine wave output; Remote management; Sine wave output; Surge/noise protection; Zero transfer time
High Availability UPS Features  Green Energy-Saving Features	On-Line/Double-Conversion; On-Line (VFI) Operation; Pure sine wave output; Remote management; Sine wave
	On-Line/Double-Conversion; On-Line (VFI) Operation; Pure sine wave output; Remote management; Sine wave output; Surge/noise protection; Zero transfer time
Green Energy-Saving Features	On-Line/Double-Conversion; On-Line (VFI) Operation; Pure sine wave output; Remote management; Sine wave output; Surge/noise protection; Zero transfer time  High efficiency economy mode operation; Schedulable daily hours of economy mode operation
Green Energy-Saving Features Grounding Details	On-Line/Double-Conversion; On-Line (VFI) Operation; Pure sine wave output; Remote management; Sine wave output; Surge/noise protection; Zero transfer time  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  Yes
Green Energy-Saving Features Grounding Details IP68 Rated	On-Line/Double-Conversion; On-Line (VFI) Operation; Pure sine wave output; Remote management; Sine wave output; Surge/noise protection; Zero transfer time  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  Yes  No
Green Energy-Saving Features Grounding Details IP68 Rated IP20 Rated	On-Line/Double-Conversion; On-Line (VFI) Operation; Pure sine wave output; Remote management; Sine wave output; Surge/noise protection; Zero transfer time  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  Yes  No
Green Energy-Saving Features Grounding Details IP68 Rated IP20 Rated APPLICATIONS	On-Line/Double-Conversion; On-Line (VFI) Operation; Pure sine wave output; Remote management; Sine wave output; Surge/noise protection; Zero transfer time  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  Yes  No  No
Green Energy-Saving Features Grounding Details IP68 Rated IP20 Rated APPLICATIONS UPS Applications	On-Line/Double-Conversion; On-Line (VFI) Operation; Pure sine wave output; Remote management; Sine wave output; Surge/noise protection; Zero transfer time  High efficiency economy mode operation; Schedulable daily hours of economy mode operation  Yes  No  No



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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