

## SmartOnline SV Series 40kVA Small-Frame Modular Scalable 3-Phase On-Line Double-Conversion 208/120V 50/60 Hz UPS System, No SVBM Battery Modules

MODEL NUMBER: **SV40KS2P0B**



3-phase 40kVA UPS system offers network-grade power protection in a highly configurable, modular and scalable small-chassis rack-width frame. External batteries required to operate.

### Description

The SV40KS2P0B SmartOnline® SV Series 40kVA Small-Frame 3-Phase On-Line Double-Conversion UPS System delivers true scalability and offers the highest level of secure, uninterrupted power protection. Featuring a modular, scalable design with high-efficiency voltage and frequency independent (VFI) operation, this on-line UPS system with a high 0.9 power factor is ideal for protecting a variety of critical IT systems.

The SV40KS2P0B includes pre-installed input, bypass and output breakers, as well as a static transfer switch (STS) and two 20kVA SV20PM power modules. Space is included for one additional user-installable SV20PM power module. External  $\pm 120\text{VDC}$  battery options, such as BP240V370 or EBP240VXXX series battery cabinets, are available from Tripp Lite for extended runtime.

The Java-free HTML5-based WEBCARDLX interface 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.

With up to 92% efficiency in standard mode and up to 98% efficiency in optional economy mode, this 40kVA UPS system helps you reduce operating and cooling costs. Automatic and manual bypass options keep connected equipment operational during routine maintenance or critical power module failure. Front-panel display offers full UPS condition and status reporting.

### Features

**40kVA 36kW 3-Phase Small-Chassis UPS System** Supports 208/120V or 220/127V AC 50/60Hz Wye 4-wire plus Earth hardwire input and output wiring  
Dual hardwire input design enables operation from up to 2 power sources  
Network-grade sine-wave AC output with 1% output voltage regulation and less than 2% output total harmonic distortion  
Tested to UL 1778 (U.S.), CSA (Canada) and NOM (Mexico) standards  
High 0.9 power factor offers higher kW output than lower-rated competing legacy designs

**Pre-Installed WEBCARDLX Network Interface** Allows full remote access for power monitoring, configuration, control and email notifications via secure web browser, SNMP, telnet or SSH  
Supports 10/100 Mbps auto-sensing for communication with an Ethernet network  
Optional EnviroSense2 sensors (sold separately) enable site monitoring of temperature, humidity and contact-closure status  
No Java required

### Highlights

- Scalable capacity up to 60kVA (or 40kVA with N+1 fault tolerance)
- Economy mode option helps reduce operating and cooling costs
- Pre-installed WEBCARDLX network interface for 24/7 remote access
- DSP/IGBT technology and 1% output voltage regulation
- No internal batteries and requires external batteries to operate.

### Package Includes

- SV40KS2P0B SmartOnline SV Series 40kVA Small-Frame 3-Phase On-Line Double-Conversion UPS System
- Pre-installed WEBCARDLX network interface
- (2) SV20PM 20kVA power modules (shipped separately)
- Owner's manual

**Modular, Scalable Design for Maximum Flexibility** Modular configuration with hot-swappable power and battery modules enables easy, fast maintenance with zero downtime Open slot for 1 additional 20kVA SV20PM power module accommodates increased capacity up to 60kVA (or 40kVA with N+1 fault tolerance) Supports external  $\pm 120$ VDC battery options for extended runtimes

**Optional Economy Mode** Up to 98% efficiency in optional economy mode to lower operating and cooling costs

**Wide Input/Narrow Output Voltage Operating Range** Enables full continuous online operation during brownouts as low as 121V and overvoltages up to 253V Regulates output voltage within 1% of the selected nominal output voltage in on-line double-conversion mode

**Advanced IGBT Inverter with Digital Signal Processor (DSP) Technology** Provides for less than 3% input total harmonic distortion (THDi) to support 1:1 generator sizing and prevent the need to oversize generator systems relative to UPS capacity

**Automatic and Manual Bypass Options** Keep connected equipment operational during routine maintenance or critical power module failure

## Specifications

OVERVIEW	
UPC Code	037332237439
UPS Type	On-Line
INPUT	
Input Phase	3-Phase
Rated input current (Maximum Load)	SV40KS2P0B 40kVA Configuration: 120A; Maximum 60kVA Configuration: 180A; 313.7A maximum inrush current
Nominal Input Voltage(s) Supported	120/208V 3-PH Wye; 127/220V 3-PH Wye
Nominal Input Voltage Description	Set of two hardwire input connections enables 3-Phase Wye, 4 wire (3P, N, E) inputs from two separate power sources
UPS Input Connection Type	Hardwire
Input Circuit Breakers	MAIN and ALTERNATE AC inputs are each protected by 250A 3 pole magnetic breakers
Input Frequency	40 to 70Hz (online mode); 50/60Hz Auto-selectable
Power Factor (Input)	Greater than 0.99 (full load)
THDi	Less than 3% (full linear load)
OUTPUT	
Output Capacity (VA)	40000
Output Capacity (kVA)	40
Output Capacity (Watts)	36000
Output Capacity (kW)	36
Output Capacity Details	OVERLOAD CAPABILITY: Supports 105-110% load for 1 hour, 111-125% load for 10 minutes, 126-150% for 1 minute and Over 150% for 200ms before switching to Bypass; Online operation resumes when load is reduced to 100% or less



Voltage Regulation Description	Online, double-conversion power conditioning
Oversvoltage Correction	Maintains continuous output in online mode, without using battery power, during oversvoltage to 253V (Ph-Ph), reducing output to within 1% of selected 208/120V, 220/127V nominal output voltage
Undersvoltage Correction	Maintains continuous output in online mode, without using battery power, during brownout/undersvoltage conditions to 156V (Ph-Ph) at full load and to 121V (Ph-Ph) at 70% output load or less, increasing output to within 1% of selected 208/120V or 220/127V nominal output voltage
<b>USER INTERFACE, ALERTS &amp; CONTROLS</b>	
Front Panel LCD Display	145mm front panel LCD display with directional scroll and select buttons offers complete operating status display, plus setting and selection options for all UPS functions
Switches	Front panel buttons include ESC (menu escape), UP/LEFT (menu up / left), DOWN/RIGHT (menu down / right), ENTER (confirm selection), HOME (return to home screen) and POWER (on/off power control); Also includes Manual Bypass switch
Alarm Cancel Operation	Audible alarms can be muted using on-screen prompts
Audible Alarm	Unique audible alarms for POWER ON / POWER OFF (alarm sounds for 2 seconds), BATTERY MODE (alarm sounds every 2 seconds), LOW BATTERY (alarm sounds every 0.5 seconds), UPS ALARM (alarm sounds every 1 second), UPS FAULT (continuous alarm)
LED Indicators	Front panel LED indicators represent INPUT (green), BYPASS (amber), INVERTER (green), BATTERY (red) and ALARM (red)
<b>SURGE / NOISE SUPPRESSION</b>	
EMI / RFI AC Noise Suppression	Yes
AC Suppression Joule Rating	2496
AC Suppression Joule Rating Details	2496 joules (Ph-Ph), 2496 joules (Ph-N), 1872 joules (N-E)
AC Suppression Response Time	Instantaneous
<b>PHYSICAL</b>	
Primary Form Factor	Tower
Cooling Method	Fans
Installation Form Factors Supported with Included Accessories	Tower
Primary UPS Depth (mm)	1,100
Primary UPS Height (mm)	1,475
Primary UPS Width (mm)	600
Shipping Dimensions (hwd / in.)	64.76 x 29.52 x 48.03
Shipping Dimensions (hwd / cm)	164.49 x 74.98 x 122.00
Shipping Weight (lbs.)	857.00
Shipping Weight (kg)	388.73
UPS Housing Material	Steel
UPS Power Module Dimensions (hwd, in.)	58.07 x 23.62 x 43.3
UPS Power Module Weight (kg)	328.40

UPS Power Module Weight (lbs.)	724
<b>ENVIRONMENTAL</b>	
Operating Temperature Range	32° to 104°F (0° to 40°C); De-rates to 90% capacity at 95°F / 35°C and 80% capacity at 104°F / 40°C
Storage Temperature Range	5° to 140°F (-15° to 60°C)
Relative Humidity	0 to 95%, non-condensing
AC Mode BTU / Hr. (Full Load)	12249
AC Economy Mode BTU / Hr. (Full Load)	545
AC Economy Mode Efficiency Rating (100% Load)	98%
Audible Noise	Less than 70 DBA front-side, 1m
Operating Elevation (m)	Up to 1000m (At elevations over 1000m, output de-rates by 1% per 100m)
<b>COMMUNICATIONS</b>	
Network Management Cards	&nbsp;<a class="productLink" href="//tripplite.eaton.com/Web-Management-Accessory-Card-WEBCARDLX">WEBCARDLX</a>&nbsp;&nbsp;&nbsp;<a class="productLink" href="//tripplite.eaton.com/Programmable-RS-485-Management-Accessory-Card-for-Select-3-Phase-UPS-Systems-MODBUSCARDSV">MODBUSCARDSV</a>&nbsp;&nbsp;&nbsp;RELAYCARDSV
Network Monitoring Port Description	Includes pre-installed Tripp Lite WEBCARDLX network interface
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	DB9 cabling included
SNMP Compatibility	Includes pre-installed &nbsp;<a class="productLink" href="//tripplite.eaton.com/Web-Management-Accessory-Card-WEBCARDLX">WEBCARDLX</a>&nbsp;&nbsp;&nbsp;network interface card
Communications Interface	DB9 Serial; EPO (emergency power off); Pre-installed network card; Slot for SNMP/Web interface
<b>LINE / BATTERY TRANSFER</b>	
Transfer Time	No transfer time (0 ms.) in online, double-conversion mode; Less than 20 ms. transfer time in economy mode
Low Voltage Transfer to Battery Power (Setpoint)	Maintains continuous operation without using battery power during brownout/undervoltage conditions to to 156V (Ph-Ph) Full load or 121V (Ph-Ph) 70% load or less; Below the low transfer voltage 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 253V (Ph-Ph), reducing output within 1% of nominal; Above this point, output is maintained utilizing reserve battery power
<b>FEATURES &amp; SPECIFICATIONS</b>	
Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported
High Availability UPS Features	Automatic inverter bypass; Auto Probe Monitoring (included); Zero transfer time; On-Line/Double-Conversion
Green Energy-Saving Features	High efficiency economy mode operation; Schedulable daily hours of economy mode operation
IP68 Rated	No
IP20 Rated	No

STANDARDS & COMPLIANCE	
Product Certifications	CSA (Canada); NOM (Mexico); UL 1778
Product Compliance	RoHS; REACH; FCC Part 15 Class B (USA)
WARRANTY & SUPPORT	
Product Warranty Period (U.S. & Canada)	1-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	<a href="#"><u>Tripp Lite 3-Phase UPS Factory Warranty</u></a>