

# Eaton 9SX UPS

5/6/8/11 kVA



9SX 11kVA



9SX LCD tilts 45° for ease-of-viewing

#### Advanced protection for:

- Infrastructure, Industrial and Medical
- IT, Networking, Storage and Telecom



## High performance Online double conversion UPS

### Performance and Efficiency

- Double conversion topology. The Eaton 9SX constantly monitors power conditions and regulates voltage and frequency.
- With up to 95% efficiency in online double conversion mode the 9SX provides the highest efficiency level in its class to reduce energy & cooling costs.
- With a 0.9 power factor the 9SX delivers 28% more power than UPS in its class. It powers more servers than other UPSs with equivalent VA ratings and lower power factors.

### Availability and Flexibility

- The internal bypass allows service continuity in case of internal fault. Batteries are hot-swappable from the front panel without powering down critical systems.
- With its rack/tower versatile form factor the 9SX can be installed in any environment (rack kit provided as standard on RT versions).
- Stronger, longer battery life: Eaton ABM® battery management technology uses an innovative three-stage charging technique that extends battery life by up to 50%.
- More runtime can be added with up to 12 external hot-swappable battery modules, able to run systems for hours if necessary. The additional battery modules are automatically recognized by the UPS.

### Manageability

- The new graphical LCD provides clear information on the UPS's status and measurements on a single screen (in seven languages). LCD display position can be adjusted to offer the best viewable angle for tower and rack usage.
- The 9SX can meter energy consumption. kWh values can be monitored using the LCD or Eaton's Intelligent Power® Software Suite.
- Load segment control enables prioritised shutdowns of nonessential equipment to maximise battery runtime for critical devices. It can also be used to remotely reboot locked-up equipment or to manage scheduled shutdowns and sequential start-ups.
- The 9SX offers Serial, USB and relay (4 dry contacts) connectivity, plus an extra slot for an optional card (Modbus, Network or Relay). 9SX also provides Remote Power off function. Eaton's Intelligent Power® Software Suite is included with each UPS.

# EATON

Powering Business Worldwide

# Eaton 9SX UPS

- 1 Remote Off/On and Remote Power Off connectors
- 2 Slot for Network-MS, ModBus-MS or Relay-MS cards
- 3 External battery module (EBM) connector with automatic detection (RJ11)



- 4 DB 9 with output contacts
- 5 USB and serial ports
- 6 Input/Output connections

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Technical Specifications	5kVA	6kVA	8kVA	11kVA
Rating (kVA/kW)	5kVA/4.5kW	6kVA/5.4kW	8kVA/7.2kW	11kVA/10kW
<b>Electrical Characteristics</b>				
Technology	On-line double conversion with Power Factor Correction (PFC) system			
Nominal voltage	200/208/220/230/240V		200/208/220/230/240V/250V	
Input voltage range	176-276V without derating (up to 100-276V with derating)			
Output voltage/THDU	200/208/220/230/240V +/- 1%; THDU <2%		200/208/220/230/240/250V +/- 1%; THDU <2%	
Input frequency range/THDI	40-70Hz, 50/60Hz autoselection, frequency converter as standard, THDI < 5%			
Efficiency	Up to 94% in Online mode, 98% in Hi-Efficiency mode		Up to 95% in Online mode, 98% in Hi-Efficiency mode	
Crest factor/short circuit current	3:1/90A	3:1/90A	3:1/120A	3:1/150A
Overload capacity	102-110% : 120s, 110-125%: 60s, 125-150%: 10s, >150%: 500ms		102-110% : 120s, 110-125%: 60s, 125-150%: 10s, >150%: 900ms	
<b>Connections</b>				
Input	Terminal block (up to 10 mm <sup>2</sup> )		Terminal block (up to 16mm <sup>2</sup> )	
Outputs	Terminal block + 2 controlled groups of 4 IEC C13 (10A) + 2 IEC C19 (16A)		Terminal block	
<b>Batteries</b>				
Typical backup times at 50 and 70% load*				
9SX	13/10 min	11/8 min	15/10 min	9/5min
9SX + 1 EBM	60/40 min	48/34 min	38/25 min	22/15 min
9SX + 4 EBM	220/150 min	170/120 min	120/82 min	80/55 min
Battery management	ABM® and Temperature compensated charging method (user selectable), automatic battery test, deep discharge protection, automatic recognition of external battery units.			
<b>Communication</b>				
Communication ports	1 USB port, 1 RS232 serial port (USB and RS232 ports cannot be used simultaneously), 4 dry contacts (DB9), 1 mini terminal block for remote On/Off and 1 for remote power Off.			
Communication slot	1 slot for Network-MS card, ModBus-MS or Relay-MS cards.			
<b>Operating conditions, standards and approvals</b>				
Operating temperature	0 to 40°C continuous			
Noise level	<45dB	<45dB	<48db	<50db
Safety	IEC/EN 62040-1, UL 1778, CSA 22.2			
EMC, performance	IEC/EN 62040 -2 , FCC Class A, IEC/EN 62040-3 (Performance)			
Approvals	CE, CB report (TUV), UL			
<b>Dimensions H x W x D/Weight</b>				
UPS	440(19")*130(3U)*685mm/48kg	440(19")*130(3U)*685mm/48kg	440(19")*260(6U)*700mm/84kg	440(19")*260(6U)*700mm/86kg
EBM	440(19")*130(3U)*645mm/68kg	440(19")*130(3U)*645mm/68kg	440(19")*130(3U)*680mm/65kg	440(19")*130(3U)*680mm/65kg
Power module	-	-	440(19")*130(3U)*700mm/19kg	440(19")*130(3U)*700mm/21kg
<b>Customer Service and Support</b>				
Warranty	2 years warranty			

\* Runtimes are shown at 0.7 power factor. Backup times are approximate and may vary with equipment, configuration, battery age, temperature, etc

Parts Numbers	9SX 5kVA	9SX 6kVA	9SX 8kVA	9SX 11kVA
UPS	-	-	9SX8Ki	9SX11Ki
UPS with Rack Kit	9SX5KiRT	9SX6KiRT	9SX8KiRT	9SX11KiRT
EBM	-	-	9SXEBM240	9SXEBM240
EBM with Rack Kit	9SXEBM180RT	9SXEBM180RT	-	-
Power Module	-	-	9SX8KiPM	9SX11KiPM
HotSwap Maintenance ByPass	MBP6Ki	MBP6Ki	MBP11Ki	MBP11Ki
Transformer Module	TFMR11Ki	TFMR11Ki	TFMR11Ki	TFMR11Ki
Supercharger with Rack Kit	-	-	SC240RT	SC240RT
1.8m Battery Connection Cable	EBMCBL180	EBMCBL180	EBMCBL240	EBMCBL240
Battery Integration System	BINTSYS	BINTSYS	BINTSYS	BINTSYS
Rack Kit	9RK	9RK	9RK	9RK

