

# Eaton 9SX UPS

5/6/8/11 kVA



9SX11KI



9SX6KI

#### 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 tower or 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 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 (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 is included with each UPS.



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# Eaton 9SX UPS

- 1 Remote Off/On and Remote Power Off connectors
- 2 Slot for Management card
- 3 External battery module (EBM) connector with automatic detection (RJ11)



Eaton 9SX 11 kVA

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

## Technical specifications

	5 kVA	6 kVA	8 kVA	11 kVA
Rating (kVA/kW)	5 kVA/4.5 kW	6 kVA/5.4 kW	8 kVA/7.2 kW	11 kVA/10 kW
Format	Tower or RT (Rack/Tower)	Tower or RT (Rack/Tower)	RT (Rack/Tower)	RT (Rack/Tower)

### Electrical characteristics

Technology	On-line double-conversion with Power Factor Correction (PFC) system			
Nominal voltage	200/208/220/230/240 V		200/208/220/230/240 V/250 V	
Input voltage range	176-276V without derating (RT models: 100-276V with derating, Tower models: 120-276V with derating)			
Input frequency range	40-70 Hz, 50/60 Hz autoselection, frequency converter as standard			
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	3:1/90 A	3:1/90 A	3:1/120 A	3:1/150 A
Overload capacity	Tower models: 102-110% : 120s, 110-125%: 60s, 125-150%: 10s, >150%: 500ms RT models: 102-130% : 120s, 130-150%: 30s, 125-150%: 10s, >150%: 100ms		102-110% : 120 s, 110-125%: 60 s, 125-150%: 10 s, >150%: 900 ms	

### Connections

Input	Terminal block (up to 10 mm <sup>2</sup> )	Terminal block (up to 16 mm <sup>2</sup> )
Outputs	Tower models: Terminal block RT models: Terminal block + 2 controlled groups of 4 IEC C13 (10A) + 2 IEC C19 (16A)	Terminal block

### Batteries

Typical backup times at 50 and 70% load*				
9SX	Tower: 30/19 min RT: 13/10 min	Tower: 24/15 min RT: 11/8 min	15/10 min	9/5 min
9SX + 1 EBM	Tower: 120/70 min, RT: 60/40 min	Tower: 90/57 min RT: 48/34 min	38/25 min	22/15 min
9SX + 4 EBM	Tower: 485/275 min, RT: 220/150 min	Tower: 385/220 min, RT: 170/120 min	120/82 min	80/55 min
Battery management	ABM® & Temperature compensated charging method, Automatic battery test, deep discharge protection, automatic recognition of external battery units			

### Communication

Communication ports	USB and Serial ports (cannot be used simultaneously), Dry contact, 1 Remote Power Off (all models), 1 Remote On/Off (RT format models)
Communication slot	1 slot for Network-M2, Network-MS, ModBus-MS or Relay-MS cards.

### Operating conditions, standards and approvals

Operating temperature	0 to 40°C continuous			
Typical noise level	<46dB	<46dB	<48 dB	<50 dB
Safety	IEC/EN 62040-1, UL 1778 & CSA 22.2 (5 & 6kVA RT only)			
EMC, performance	IEC/EN 62040 -2, IEC/EN 62040-3			
Approvals	CE, CB report (TUV), UL (5 & 6kVA RT only)			

### Dimensions H x W x D/Weight

UPS	Tower: 575x244x542mm/65.5kg, RT: 440(19'')x130(3U)x685mm/48kg	440(19'')*260(6U)*700mm/84kg	440(19'')x260(6U)x700 mm/86 kg
EBM	Tower: 575x244x542mm/104,9kg, RT: 440(19'')x130(3U)x645mm/68kg	440(19'')*130(3U)*680mm/65kg	440(19'')x130(3U)x680 mm/65 kg
Power module	-	-	440(19'')x130(3U)x700 mm/19 kg 440(19'')x130(3U)x700 mm/21 kg

### Customer service and support

Warranty	2 years warranty
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\* 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 5 kVA	9SX 6 kVA	9SX 8 kVA	9SX 11 kVA
UPS (Tower)	9SX5KI	9SX6KI	-	-
UPS (RT format)*	-	-	9SX8KI	9SX11KI
UPS (RT with rack kit)*	9SX5KIRT	9SX6KIRT	9SX8KIRT	9SX11KIRT
EBM (Tower)	9SXEBM240T	9SXEBM240T	-	-
EBM (RT format)	-	-	9SXEBM240	9SXEBM240
EBM (RT with rack kit)	9SXEBM180RT	9SXEBM180RT	-	-
Power Module	-	-	9SX8KIPM	9SX11KIPM
HotSwap Maintenance ByPass	MBP6KI	MBP6KI	MBP11KI	MBP11KI
Supercharger with Rack Kit	-	-	SC240RT	SC240RT
1.8m Battery Connection Cable	Tower: EBM CBL240T, RT: EBM CBL180	Tower: EBM CBL240T, RT: EBM CBL180	EBM CBL240	EBM CBL240
Rack Kit	-	-	9RK	9RK

\* For 8 & 11 kVA UPS: Power Module + EBM

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