

# Eaton 9PX UPS

5–22kVA



Rack/Tower versatile



9PX 1:1 is an Energy Star® qualified UPS



9PX 11kVA with maintenance bypass

### Advanced protection for:

- Small and Medium Datacentre
- IT, Networking, Storage and Telecom
- Infrastructure, Industrial and Medical



## Energy efficient power protection

### Performance and Efficiency

- Double conversion topology. The Eaton 9PX constantly monitors power conditions and regulates voltage and frequency.
- With up to 95% efficiency in online double conversion mode and 98% in high-efficiency mode the 9PX provides the highest efficiency level in its class to reduce energy and cooling costs.
- With a 0.9 power factor the 9PX delivers 28% more power than any UPS in its class. It powers more servers than other UPSs with equivalent VA ratings and lower power factors.
- With a RT (Rack/tower) versatile form factor the 9PX is the most compact solution in its class delivering up to 5400W in only 3U and 10kW in only 6U.

### 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 9PX can meter energy consumption. kWh values can be monitored using the LCD or Eaton's Intelligent Power® Software.
- 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 network equipment or to manage scheduled shutdowns and sequential start-ups.
- The 9PX offers Serial, USB and relay connectivity, plus an extra slot for an optional card (Network card delivered as standard on Netpack version). Eaton's Intelligent Power® Software is compatible with all major OS including virtualisation software such as VMware and Hyper-V is included with each UPS.

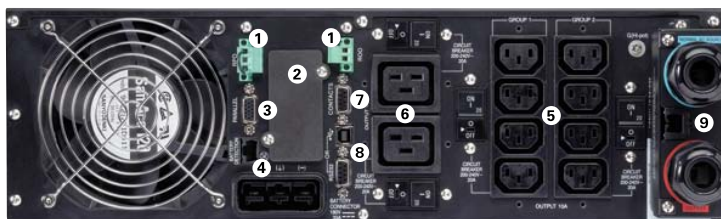
### Availability and Flexibility

- The internal bypass allows service continuity in case of internal fault, a maintenance bypass is also available (as standard on HotSwap version) for easy replacement of the UPS without powering down critical systems.
- The 9PX can be paralleled to achieve twice the power of unitary product using HotSync technology, without extra cost on the initial purchase.
- 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 recognised by the UPS.

Powering Business Worldwide

# Eaton 9PX UPS Technical Specifications

- 1 Remote Off/On and Remote Power Off connectors
- 2 Slot for Network-MS, ModBus-MS or Relay-MS cards
- 3 Parallel operation port (DB15)
- 4 External battery module (EBM) connector with automatic detection (RJ11)



- 5 8 IEC 10A sockets (2 groups of 4 manageable sockets) with cable retention system
- 6 2 IEC 16A sockets with cable retention system
- 7 DB 9 with output contacts
- 8 USB and serial ports
- 9 Input/Output connection

Eaton 9PX 6kVA 1:1

Technical Specifications	5kVA 1:1	6kVA 1:1	6kVA 3:1	8kVA 1:1 or 3:1	11kVA 1:1 or 3:1		
Rating (kVA/kW)	5kVA/4.5kW	6kVA/5.4kW	6kVA/5.4kW	8kVA/7.2kW	11kVA/10kW		
<b>Electrical Characteristics</b>							
Technology	On-line double conversion with Power Factor Correction (PFC) system						
Input voltage	200/208/220/230/240V 1:1		200/208/220/230/240V/250V 1:1, 380/400/415 3:1				
Input voltage range	176-276V without derating (up to 100-276V with derating) 1:1, 305V-480V without derating (up to 175V-480V with derating) 3:1						
Output voltage/THDU	200/208/220/230/240V +/- 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			
Short circuit current	90A	90A	90A	120A	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				
Outputs with HotSwap Maintenance Bypass	Terminal block + 3 IEC C13 (10A) + 2 IEC C19 (16A)		Terminal block + 4 IEC C19 (16A)				
<b>Batteries</b>							
Typical backup times at 50 and 70% load*							
9PX	13/10 min	11/8 min	30/20min	20/15 min	13/9min		
9PX + 1 EBM	60/40 min	48/34 min	70/45min	48/32 min	32/21 min		
9PX + 4 EBM	220/150 min	170/120 min	210/140 min	140/100 min	100/70 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, 1 DB15 for parallel operation.						
Communication slot	1 slot for Network-MS card (included in Netpack versions), 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	<48db	<50db		
Safety	IEC/EN 62040-1, UL 1778 (1:1 version)						
EMC, performance	IEC/EN 62040 -2, FCC Class A (1:1 version), IEC/EN 62040-3 (Performance)						
Approvals	CE, CB report (TUV), UL (1:1 version)						
<b>Dimensions H x W x D/Weight</b>							
UPS dimensions	440(19")*130(3U)*685mm	440(19")*130(3U)*685mm	440(19")*260(3U+3U)*700mm	440(19")*260(3U+3U)*700mm	440(19")*260(3U+3U)*700mm		
UPS weight	48kg	48kg	88kg	84kg (1:1), 88kg (3:1)	86kg (1:1), 88kg (3:1)		
EBM dimensions	440(19")*130(3U)*645mm	440(19")*130(3U)*645mm	440(19")*130(3U)*680mm	440(19")*130(3U)*680mm	440(19")*130(3U)*680mm		
EBM weight	68kg	68kg	65kg	65kg	65kg		
Power module dimensions	-	-	440(19")*130(3U)*700mm	440(19")*130(3U)*700mm	440(19")*130(3U)*700mm		
Power module weight	-	-	23kg	19kg (1:1), 23kg (3:1)	21kg (1:1), 23kg (3:1)		
<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							
<b>Parts Numbers</b>							
UPS with HotSwap Maintenance Bypass	9PX5KiBP	9PX6KiBP	9PX8KiBP	9PX11KiBP	9PX6KiBP31	9PX8KiBP31	9PX11KiBP31
UPS with Network Card and Rack Kit	9PX5KiRTN	9PX6KiRTN	-	-	-	-	-
UPS with HotSwap MBP, Network Card and Rack Kits	-	-	9PX8KiRTNBP	9PX11KiRTNBP	9PX6KiRTNBP31	9PX8KiRTNBP31	9PX11KiRTNBP31
EBM	9PXEBM180	9PXEBM180	9PXEBM240	9PXEBM240	9PXEBM240	9PXEBM240	9PXEBM240
Power Module	-	-	9PX8KiPM	9PX11KiPM	9PX6KiPM31	9PX8KiPM31	9PX11KiPM31
HotSwap Maintenance Bypass	MBP6Ki	MBP6Ki	MBP11Ki	MBP11Ki	MBP11Ki31	MBP11Ki31	MBP11Ki31
9PX Modular Easy (paralleling kit)	9PXMEZ6Ki	9PXMEZ6Ki	9PXMEZ11Ki	9PXMEZ11Ki	-	-	-
Supercharger with Rack Kit	-	-	SC240RT	SC240RT	SC240RT	SC240RT	SC240RT
1.8m Battery Connection Cable	EBMCBL180	EBMCBL180	EBMCBL240	EBMCBL240	EBMCBL240	EBMCBL240	EBMCBL240
Accessories	Rack kit: 9RK, Transformer (Single Phase): TFM11Ki, Battery Integration System: BINTSYS						
<b>9PX Parallel*</b>							
9PX 10kVA 1:1 (5kVA redundant)	9PX12kVA 1:1 (6kVA redundant)	9PX16kVA 1:1 (8kVA redundant)	9PX22kVA 1:1 (11kVA redundant)				
9PXM10KiRTN	9PXM12KiRTN	9PXM16KiRTN	9PXM22KiRTN				