

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

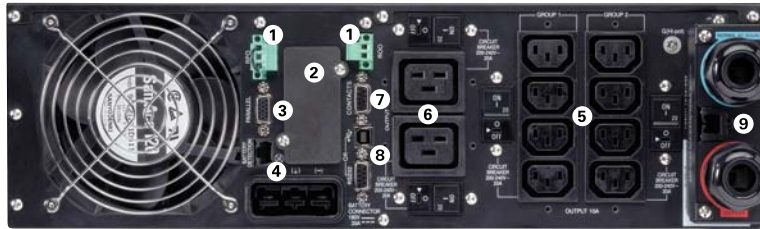
- The internal bypass allows service continuity in case of internal fault, a maintenance bypass is also available (as standard on HotSwap version) for easy replacement of the UPS without powering down critical systems.
- The 9PX can be paralleled to achieve twice the power of unitary product using HotSync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

EATON

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 |
| Electrical Characteristics | | | | | |
| 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 | | | | |
| Connections | | | | | |
| Input | Terminal block (up to 10 mm ²) | | Terminal block (up to 16mm ²) | | |
| 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+4IECC19(16A) | | |
| Batteries | | | | | |
| 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. | | | | |
| Communication | | | | | |
| 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. | | | | |
| Operating conditions, standards and approvals | | | | | |
| 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) | | | | |
| Dimensions H x W x D/Weight | | | | | |
| 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) |
| Customer Service and Support | | | | | |
| 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 | 9PX 5kVA 1:1 | 9PX 6kVA 1:1 | 9PX 8kVA 1:1 | 9PX 11kVA 1:1 | 9PX 6kVA 3:1 | 9PX 8kVA 3:1 | 9PX 11kVA 3:1 |
|--|--|--------------|--------------|---------------|---------------|---------------|----------------|
| 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 ModularEasy (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): TFMR11Ki, Battery Integration System: BINTSYS | | | | | | |

| 9PX Parallel* | 9PX 10kVA 1:1 (5kVA redundant) | 9PX 12kVA 1:1 (6kVA redundant) | 9PX 16kVA 1:1 (8kVA redundant) | 9PX 22kVA 1:1 (11kVA redundant) |
|---------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------------|
| | 9PXM10KiRTN | 9PXM12KiRTN | 9PXM16KiRTN | 9PXM22KiRTN |

*9PX Parallel system includes 2 x 9PX, ModularEasy (Parallel kit), rail kits and network cards

