Power Quality Solutions

## The Eaton 9PX UPS

Energy efficient power protection

## EATON

Powering Business Worldwide

## Performance and efficiency come together in the Eaton 9PX UPS

As an industry professional, and because of rising energy costs and the business need for energy-efficient performance, you'll be looking for ways to reduce costs and consumption. The Eaton 9PX UPS enables you to secure all your missioncritical applications, giving you the reductions in energy usage and costs you need.

## Eaton 9PX UPS key benefits

- Constantly monitors power conditions and regulating voltage and frequency
- Up to $\mathbf{9 5 \%}$ efficiency in online double conversion mode and $98 \%$ in high-efficiency mode
- 0.9 power factor delivers $\mathbf{2 8} \%$ more power than UPS in its class
- Compact rack/tower versatile form factor, delivering up to 5400W in only 3U and 10kW in only 6U

Essentially, the Eaton 9PX UPS gives you the chance to optimise power density and minimise capital and operating expenditure, along with the assurance that, should the power go down, critical processes will be maintained in your IT infrastructures and other applications.


## Features that set the Eaton 9PX UPS apart

- New graphical LCD display provides clear information on the UPS's status and measurements on a single screen which tilts $45^{\circ}$ for ease-of-viewing
- Metering energy consumption - kWh values can be monitored using the LCD or our own Intelligent Power ${ }^{\circledR}$ Software Suite
- Availability and Flexibility - The internal bypass allows service continuity in case of internal fault, a maintenance bypass is also available for easy replacement of the UPS without powering down critical systems
- Paralleling functionality to achieve twice the power of unitary products using Hot Sync technology
- Load segment control enables prioritised shutdowns of nonessential equipment to maximise battery runtime for critical devices ( 5 and 6kVA UPS)
- Serial, USB and relay connectivity, plus an extra slot for an optional communication card
- Intelligent Power ${ }^{\circledR}$ Software Suite compatible with all major OS including virtualisation software such as VMware and Hyper-V is included with each UPS
- Eaton $\mathrm{ABM}^{\circledR}$ battery management technology for longer battery life
- Plus, add more runtime with up to $\mathbf{1 2}$ external hot-swappable battery modules, able to run systems for hours if necessary



9PX LCD tilts $45^{\circ}$ for ease-of-viewing

## Eaton innovating for more than 50 years

Eaton has been safeguarding the critical systems of businesses across the globe for over half a century. Whether protecting a single desktop or the largest data centre, Eaton solutions provide clean, uninterrupted power to keep mission-critical applications working.

We offer a comprehensive range of environmentallysensitive, efficient, reliable UPSs, surge protective devices, power distribution units (PDUs), remote monitoring, meters, software, connectivity, enclosures, airflow management and professional services.

## vmware <br> READY

 redhat. REA D YAs the ultimate protection for your IT equipment, the Eaton 9PX UPS also integrates seamlessly into all major virtual environments including VMWare, Hyper-V, Citrix XenServer, RedHat KVM. With Eaton you are sure to benefit from the best of virtualisation technology.


9PX 11kVA with Maintenance Bypass


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)


Eaton 9PX 6kVA 1:1

58 IEC 10A sockets (2 groups of 4 manageable sockets) with cable retention system

62 IEC 16A sockets with cable retention system

7 DB 9 with output contacts
8 USB and serial ports
9 Input/Ouput connection

## Eaton 9PX UPS Technical Specifications

| 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 $175 \mathrm{~V}-480 \mathrm{~V}$ with derating) $3: 1$ |  |  |  |  |
| Output voltage/THDU | 200/208/220/230/240V +/- 1\%; THDU <2\% |  |  |  |  |
| Input frequency range/THDI | $40-70 \mathrm{~Hz}, 50 / 60 \mathrm{~Hz}$ autoselection, frequency converter as standard, THDI < 5\% |  |  |  |  |
| Efficiency | Up to 94\% in Online mode, $98 \%$ in Hi-Efficiency mode |  |  |  |  |
| Short circuit current | 90A | 90A | 90A | 120A | 150A |
| Overload capacity | 102-110\% : 120s, $110-125 \%$ : 60s, $125-150 \%$ : 10 s , >150\%: $500 \mathrm{~ms} \quad 102-110 \%$ : $120 \mathrm{~s}, 110-125 \%$ : $60 \mathrm{~s}, 125-150 \%: 10 \mathrm{~s},>150 \%: 900 \mathrm{~ms}$ |  |  |  |  |
| Connections |  |  |  |  |  |
| Input | Terminal block (up to $10 \mathrm{~mm}^{2}$ ) |  | Terminal block (up to $16 \mathrm{~mm}^{2}$ ) |  |  |
| 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 + 4 IEC C19 (16A) |  |  |
| Batteries |  |  |  |  |  |
| Typical backup times at 50 and 70\% load* |  |  |  |  |  |
| 9PX | 13/10 min | 11/8 min | 30/20min | 20/15 min | 13/9min |
| $9 \mathrm{PX}+1$ 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 | $\mathrm{ABM}^{\circledR}$ 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, ModBus-MS or Relay-MS cards. |  |  |  |  |
| Operating conditions, standards and approvals |  |  |  |  |  |
| Operating temperature | 0 to $40^{\circ} \mathrm{C}$ 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 | $440\left(19^{\prime \prime}\right) * 260(3 \mathrm{U}+3 \mathrm{U})^{*} 700 \mathrm{~mm}$ | 440(19 ${ }^{\prime \prime}$ )*260(3U+3U)*700mm | 440(19 ${ }^{\prime \prime}$ )*260(3U+3U)*700mm |
| UPS Weight | 48 kg | 48 kg | 88 kg | $84 \mathrm{~kg}(1: 1), 88 \mathrm{~kg}(3: 1)$ | $86 \mathrm{~kg}(1: 1), 88 \mathrm{~kg}(3: 1)$ |
| 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 | 68 kg | 68 kg | 65 kg | 65 kg | 65 kg |
| Power Module Dimensions | - | - | 440(19")*130(3U)*700mm | 440(19")*130(3U)*700mm | 440(19")*130(3U)*700mm |
| Power Module Weight | - | - | 23 kg | 19kg (1:1), 23 kg (3:1) | $21 \mathrm{~kg}(1: 1), 23 \mathrm{~kg}(3: 1)$ |
| Customer Service and Support |  |  |  |  |  |
| Warranty | 3 years on electronics, 2 years on battery |  |  | 2 years on electronics, 2 years on battery |  |


| 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 Rack Kit | 9PX5KiRT | 9PX6KiRT | $9 \mathrm{PX} \times$ KiRT | $9 P X 11 \mathrm{KiRT}$ | 9PX6KiRT31 | 9PX8KiRT31 | 9PX11KiRT31 |
| EBM with Rack Kit | 9PXEBM180RT | 9PXEBM180RT | 9PXEBM240RT | 9PXEBM240RT | 9PXEBM240RT | 9PXEBM240RT | 9PXEBM240RT |
| 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 | - | - | - |
| Transformer Module single phase | TFMR11Ki | TFMR11Ki | TFMR11Ki | TFMR11Ki | TFMR11Ki | TFMR11Ki | TFMR11Ki |
| Supercharger with Rack Kit | - | - | SC240RT | SC240RT | SC240RT | SC240RT | SC240RT |
| 1.8m Battery Connection Cable | EBMCBL180 | EBMCBL180 | EBMCBL240 | EBMCBL240 | EBMCBL240 | EBMCBL240 | EBMCBL240 |
| Battery Integration System | BINTSYS | BINTSYS | BINTSYS | BINTSYS | BINTSYS | BINTSYS | BINTSYS |
| Rack Kit | 9RK | 9RK | 9RK | 9RK | 9RK | 9RK | 9RK |

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