# Eaton 9PX UPS

## 5 - 11 kVA



Rack/Tower versatile



9PX 11kVA with Maintenance ByPass

### Advanced protection for:

- Small & medium datacenter
- IT, Networking, Storage and Telecom
- Infrastucture, 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 & cooling costs.
- With a 0.9 power factor the 9PX delivers 28% more power than 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 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 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 Suite compatible with all major OS including virtualization 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 Eaton 9PX can be paralleled to achieve twice the power of unitary product using HotSync technology, without extra cost on the initial purchase (available in Q2 2013)
- 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 hotswappable battery modules, able to run systems for hours if necessary. The additional battery modules are automatically recognized by the UPS.

# Eaton 9PX UPS

- 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

- **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/Ouput connection

Rechandogy	Technical Specifications	5kVA	6kVA	8kVA	11kVA			
Cerebinology	Rating (kVA/kW)	5kVA/4.5kW	6kVA/5.4kW	8kVA/7.2kW	11kVA/10kW			
Naminal voltage   200/208/220/230/240V   200/208/220/230/240V/250V   200/208/220/220/220/220/220/220/220/220/	Electrical Characteristics		<u>'</u>					
### ### ### ### ### ### ### ### ### ##	Technology	On-line double conversion with F	ower Factor Correction (PFC) system					
Durput voltage/THDU   200/208/220/230/240V +/ = 1%; THDU <2%   200/208/220/230/240/250V +/ = 1%; THDU <2%   200/208/240/250V	Nominal voltage	200/208/220/230/240V		200/208/220/230/240V/250V				
### ### ### ### ### ### ### ### ### ##	nput voltage range	176-276V without derating (up to	100–276V with derating)					
Efficiency	Output voltage/THDU	200/208/220/230/240V +/- 1%; THI	200/208/220/230/240V +/- 1%; THDU <2%		200/208/220/230/240/250V +/- 1%; THDU <2%			
Sees   factor/short circuit current   3.1/80A   3.1/90A   3.1/120A   3.1/120A   3.1/150A   3.1/15	nput frequency range/THDI	40-70Hz, 50/60Hz autoselection, fre	40-70Hz, 50/60Hz autoselection, frequency converter as standard, THDI < 5%					
102-110%: 120s, 110-125%: 60s, 125-150%: 10s, >150%: 500ms	Efficiency	Up to 94% in Online mode, 98% in	n Hi-Efficiency mode	Up to 95% in Online mode, 98% in Hi-Efficiency mode				
Description	Crest factor/short circuit current	3:1/90A	3:1/90A	3:1/120A	3:1/150A			
Terminal block (up to 10 mm²)   Terminal block (up to 10 mm²)   Terminal block (up to 16 mm²)	Overload capacity	102-110% : 120s, 110-125%: 60s,	125–150%: 10s, >150%: 500ms	102–110% : 120s, 110–125%: 60s, 12	5–150%: 10s, >150%: 900ms			
Terminal block + 2 controlled groups of 4 IEC C13 (10A) + 2 IEC C19 (16A)   Terminal block	Connections							
Dutputs with HotSwap Maintenance Bypass	Input	Terminal block (up to 10 mm²)	Terminal block (up to 10 mm²)		Terminal block (up to 16mm²)			
Setter   S	Outputs	Terminal block + 2 controlled gro	Terminal block + 2 controlled groups of 4 IEC C13 (10A) + 2 IEC C19 (16A)		Terminal block			
Typical backup times at 50 and 70% load*	Outputs with HotSwap Maintenance Bypass	Terminal block + 3 IEC C13 (10A)	Terminal block + 3 IEC C13 (10A) + 2 IEC C19 (16A)		Terminal block + 4 IEC C19 (16A)			
13/10 min 11/8 min 20/15 min 13/9min 13/9min 13/9min 13/9min 32/21 min 32/21	Batteries							
ABM® and Temperature compensated charging method (user selectable), automatic battery test, deep discharge protection, automatic recognition of external battery units.    ABM® and Temperature compensated charging method (user selectable), automatic battery test, deep discharge protection, automatic recognition of external battery units.    ABM® and Temperature compensated charging method (user selectable), automatic battery test, deep discharge protection, automatic recognition of external battery units.    ABM® and Temperature compensated charging method (user selectable), automatic battery test, deep discharge protection, automatic protection automatic protection automatic protection and protection and 1 for remote power Off, 1 DB15 for parallel operation.    ABM® and Temperature protection automatic protection automatic protection automatic protection and 1 for remote power Off, 1 DB15 for parallel operation.    ABM® and Temperature protection automatic pr	Typical backup times at 50 and 70% load*							
### A EBM   220/150 min   170/120 min   140/100 min   140/100 min   100/70 min   100/70 min   100/70 min   140/100 min   100/70 min   1	9PX	13/10 min	11/8 min	20/15 min	13/9min			
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 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  Osafety  IEC/EN 62040-1, UL 1778, CSA 22.2  EMC, performance  IEC/EN 62040-2, FCC Class A, IEC/EN 62040-3 (Performance)  Epprovals  CE, CB report (TUV), UL  Dimensions H x W x D/Weight  UPS  440(19")*130(3U)*685mm/48kg 440(19")*130(3U)*685mm/48kg 440(19")*130(3U)*685mm/68kg 440(19")*130(3U)*700mm/19kg 440(19")*130(3U)*700mm/21i  Customer Service and Support	PPX + 1 EBM	60/40 min	48/34 min	48/32 min	32/21 min			
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 of 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.  Deparating conditions, standards and approvals  Operating temperature  0 to 40°C continuous  Noise level  45dB  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  Dimensions H x W x D/Weight  JPS  440(19")*130(3U)*685mm/48kg  440(19")*130(3U)*685mm/48kg  440(19")*130(3U)*685mm/68kg  440(19")*130(3U)*680mm/65kg  440(19")*130(3U)*690mm/65kg  440(19")*130(3U)*700mm/19kg  440(19")*130(3U)*700mm/19kg  Customer Service and Support	9PX + 4 EBM	220/150 min	170/120 min	140/100 min	100/70 min			
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 Off and 1 for remote power Off, 1 DB15 for parallel operation.    Communication slot	Battery management							
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.  Deparating conditions, standards and approvals  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  Dimensions H x W x D/Weight  UPS 440(19")*130(3U)*685mm/48kg 440(19")*130(3U)*685mm/48kg 440(19")*130(3U)*685mm/68kg 440(19")*130(3U)*680mm/65kg 440(19")*130(3U)*680mm/65kg 440(19")*130(3U)*700mm/19kg 440(19")*130(3U)*70	Communication							
Departing conditions, standards and approvals	Communication ports			ltaneously), 4 dry contacts (DB9), 1 r	nini terminal block for remote (			
Departing temperature	Communication slot	1 slot for Network-MS card (inclu	ided in Netpack versions), ModBus-MS o	r Relay-MS cards.				
Noise level	Operating conditions, standards and appro	ovals						
IEC/EN 62040 -1, UL 1778, CSA 22.2	Operating temperature	0 to 40°C continuous						
EMC, performance IEC/EN 62040 - 2 , FCC Class A, IEC/EN 62040-3 (Performance)  Approvals CE, CB report (TUV), UL  Dimensions H x W x D/Weight  JPS 440(19")*130(3U)*685mm/48kg 440(19")*130(3U)*685mm/48kg 440(19")*260(6U)*700mm/84kg 440(19")*260(6U)*700mm/86kg 440(19")*260(6U)*700mm/86kg 440(19")*30(3U)*680mm/65kg 440(19")*30(3U)*680mm/65kg 440(19")*30(3U)*680mm/65kg 440(19")*30(3U)*700mm/21kg 440(19")*30(3U)*30(3U)*30(3U)*30(3U)*30(3U)*30(3U)*30(3U)*30(3U)*30(3U)*30(3U)*30(3U)	Noise level	<45dB	<45dB	<48db	<50db			
Approvals CE, CB report (TUV), UL  Dimensions H x W x D/Weight  JPS 440(19")*130(3U)*685mm/48kg 440(19")*130(3U)*685mm/48kg 440(19")*260(6U)*700mm/84kg 440(19")*260(6U)*700mm/84kg 440(19")*260(6U)*700mm/86kg 440(19")*30(3U)*685mm/65kg 440(19")*30(3U)*685mm/65kg 440(19")*30(3U)*680mm/65kg 440(19")*30(3U)*700mm/19kg 440(19")*30(3U)*700mm/21kg  Customer Service and Support	Safety	IEC/EN 62040-1, UL 1778, CSA 22.	IEC/EN 62040-1, UL 1778, CSA 22.2					
Approvals CE, CB report (TUV), UL  Dimensions H x W x D/Weight  JPS 440(19")*130(3U)*685mm/48kg 440(19")*130(3U)*685mm/48kg 440(19")*260(6U)*700mm/84kg 440(19")*260(6U)*700mm/84kg 440(19")*260(6U)*700mm/86kg 440(19")*30(3U)*685mm/65kg 440(19")*30(3U)*685mm/65kg 440(19")*30(3U)*680mm/65kg 440(19")*30(3U)*700mm/19kg 440(19")*30(3U)*700mm/21kg  Customer Service and Support	EMC, performance	IEC/EN 62040 -2 , FCC Class A, IEC	IEC/EN 62040 -2 , FCC Class A, IEC/EN 62040-3 (Performance)					
UPS         440(19")*130(3U)*685mm/48kg         440(19")*130(3U)*685mm/48kg         440(19")*260(6U)*700mm/84kg         440(19")*260(6U)*700mm/84kg         440(19")*260(6U)*700mm/86kg         440(19")*260(6U)*700mm/86kg         440(19")*30(3U)*680mm/65kg         440(19")*130(3U)*680mm/65kg         440(19")*130(3U)*700mm/21kg         440(19")*130(3U)*700mm/21kg         440(19")*130(3U)*700mm/21kg         440(19")*130(3U)*700mm/21kg         440(19")*130(3U)*700mm/21kg           Customer Service and Support         - <td>Approvals</td> <td>CE, CB report (TUV), UL</td> <td colspan="5"></td>	Approvals	CE, CB report (TUV), UL						
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 440(19")*130(3U)*700mm/19kg 440(19")*130(3U)*700mm/19kg 440(19")*130(3U)*700mm/21kCustomer Service and Support	Dimensions H x W x D/Weight							
Power module – 440(19")*130(3U)*700mm/19kg 440(19")*130(3U)*700mm/21k Customer Service and Support	UPS	440(19")*130(3U)*685mm/48kg	440(19")*130(3U)*685mm/48kg	440(19")*260(6U)*700mm/84kg	440(19")*260(6U)*700mm/86k			
Customer Service and Support	EBM	440(19")*130(3U)*645mm/68kg	440(19")*130(3U)*645mm/68kg	440(19")*130(3U)*680mm/65kg	440(19")*130(3U)*680mm/65k			
	Power module	-	-	440(19")*130(3U)*700mm/19kg	440(19")*130(3U)*700mm/21k			
Varranty 2 years warranty	Customer Service and Support							
	Varranty	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
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Parts Numbers	9PX 5kVA	9PX 6kVA	9PX 8kVA	9PX 11kVA
UPS with HotSwap Maintenance ByPass	9PX5KiBP	9PX6KiBP	9PX8KiBP	9PX11KiBP
UPS with Network Card and Rack Kit	9PX5KiRTN	9PX6KiRTN	-	-
UPS with HotSwap MBP, Network Card and Rack Kits	-	_	9PX8KiRTNBP	9PX11KiRTNBP
EBM	9PXEBM180	9PXEBM180	9PXEBM240	9PXEBM240
Power Module	-	-	9PX8KiPM	9PX11KiPM
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











