



# Eaton 9PX lithium-ion UPS

## Double-conversion UPS that offers a set-it-and forget-it deployment

The 9PX lithium-ion UPS is part of the Eaton 9 series single-phase double-conversion UPS line, best applied to mission-critical equipment for constant power conditioning. The 9PX lithium-ion UPS provides 8 to 10 years of life expectancy for UPS and its batteries, and has power ratings ranging from 1 to 3 kVA, while also offering up to four external battery modules (EBM) for extra runtime. The 9PX lithium-ion UPS has the same reliable features as the 9PX lead-acid UPS, including load segments for prioritized shutdowns, remote power on (RPO), remote on/off (ROO) and output relay ports that increase control capabilities. For connectivity, the 9PX is compatible with the Gigabit Network Card (NETWORK-M2), which is the first UPS connectivity device to meet both UL and IEC cybersecurity standards. This network interface card improves power system reliability by providing warnings of pending issues and helping to perform orderly graceful shutdown of servers and storage.



For even more runtime, add up to four EBMs to your 9PX UPS



### Key features and benefits

#### Save money

- **2-3X longer battery life:** minimize battery maintenance expense—ideal for large deployments and edge applications
- **Runtime:** 80–120% more runtime at full load compared to lead-acid batteries
- **Warranty:** 5-year all-inclusive (electronics and battery) warranty

#### Save space

- **1U lithium EBM vs 2U lead-acid EBM**
- **Lightweight design** 40% less weight than a comparable lead-acid UPS allowing easier installation and saving time

#### Reduce risk

- **24/7 monitoring:** battery management system (BMS) improves reliability and performance by actively monitoring temperature and charge
- **Cybersecure:** remote monitoring service and network connectivity card options provide cybersecurity protection and keeps you connected with your UPS status updates
- **On-board BMS monitoring** in combination with proven Lithium Iron Phosphate (LFP) chemistry provides a reliable and safe offering, giving you peace of mind

## IPM – Intelligent Power Manager

### The power of automation.

IPM is an easy-to-use disaster avoidance platform with sophisticated capabilities that include triggering alerts and automating resolutions to keep applications running. IPM enables you to:

- Leverage Eaton’s integrations with industry leaders to keep critical applications running and automate resolutions for your entire network risking potential downtime.
- Migrate workloads to increase system uptime and minimize generator load by suspending non-critical virtual machines.
- Power cap servers to keep critical loads running longer by limiting server power consumption.

Learn more at [Eaton.com/IPM](http://Eaton.com/IPM)

## VPM – Visual Power Manager

### The power of monitoring.

With Visual Power Manager (VPM), you can remotely monitor the power of thousands of PDU and UPS devices through a user-friendly, visual interface that simplifies data for quick action. VPM enables you to:

- Gain vendor agnostic insight. Monitor a mixed environment through VPM’s unique protocol-based data collection.
- Know what’s coming. Analyze power devices visually and get notified ahead of replacement through custom reports.
- Get real-time, rack-level statistics. Quickly remediate through up-to-the-minute analytics, notifications and alarms for events exceeding what any branch can support.

Learn more at [Eaton.com/VPM](http://Eaton.com/VPM)

## PredictPulse™ Insight

### The power of predictability.

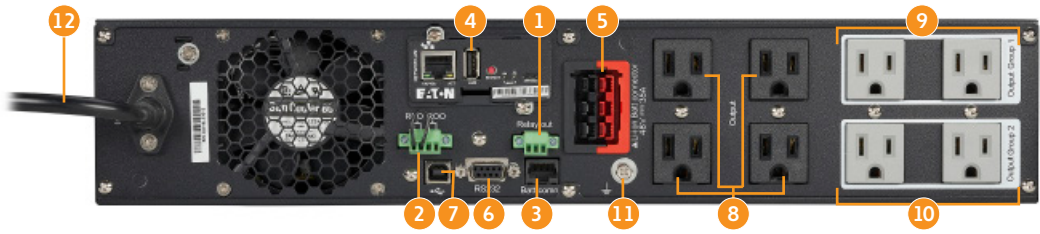
PredictPulse Insight is the industry’s first cloud-based 24x7 remote monitoring and predictive analytics subscription service to forecast data center power component failure and proactively replace components before failure. PredictPulse enables you to:

- **Save time.** Focus on other critical IT tasks while this predictive analytics service and Eaton’s remote monitoring team oversees power remotely.
- **Save money.** Eliminate surprise maintenance expenses — this subscription-based service includes parts, labor, on-going preventive maintenance and expedited repairs.
- **Reduce risk.** Utilize Eaton’s proprietary algorithms, based on data from thousands of installed devices to predict UPS component failure and proactively replace parts before issues arise.

Learn more at [Eaton.com/PredictPulse](http://Eaton.com/PredictPulse)

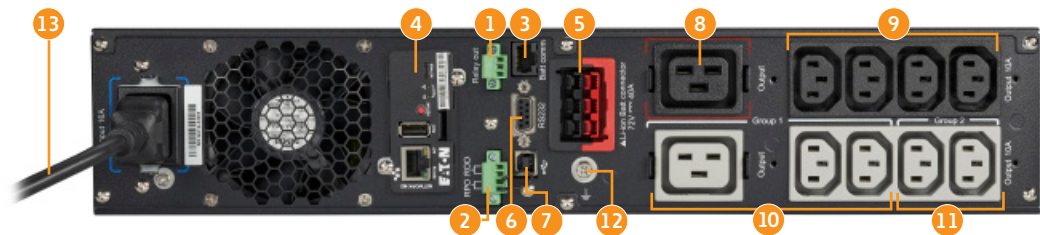
## Rear panel overview

### Model 9PX1500RT-L



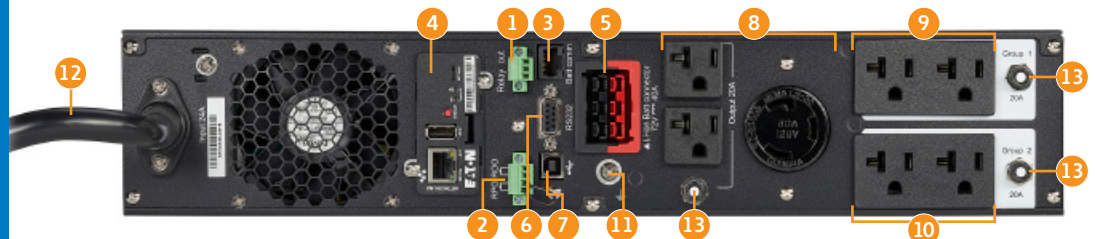
- |   |   |                                     |
|---|---|-------------------------------------|
| 1 Output relay port                                   | 5 EBM connector                                     | 9 (2) 5-15R (load segment group 1)  |
| 2 Remote power off (RPO) and remote on/off (ROO) port | 6 RS-232 serial communication port (cable included) | 10 (2) 5-15R (load segment group 2) |
| 3 External battery module (EBM) detection port        | 7 USB port (cable included)                         | 11 Ground bonding screw             |
| 4 NETWORK-M2 card (optional)                          | 8 (2) 5-15R managed outlets (primary group)         | 12 8-foot line cord with 5-15P      |

### Model 9PX2200GRT-L and 9PX3000GRT-L



- |   |   |   |
|---|---|---|
| 1 Output relay port                                   | 6 RS-232 serial communication port (cable included) | 10 (1) C19 and (2) C13 managed outlets (load segment group 1)                       |
| 2 Remote power off (RPO) and remote on/off (ROO) port | 7 USB port (cable included)                         | 11 (2) C13 managed outlets (load segment group 2)                                   |
| 3 External battery module (EBM) detection port        | 8 (1) C19 outlet                                    | 12 Ground bonding screw   |
| 4 NETWORK-M2 card (optional)                          | 9 (4) C13 managed outlets (primary group)           | 13 C20/L6-20P input connection (detachable L6-20P to C19 input cord is 6-foot long) |
| 5 EBM connector                                       |   |   |

### Model 9PX3000RT-L



- |   |  |   |
|---|--|---|
| 1 Output relay port                                   | 6 RS-232 serial communication port (cable included)        | 10 (2) 5-20R managed outlets (load segment group 2) |
| 2 Remote power off (RPO) and remote on/off (ROO) port | 7 USB port (cable included)                                | 11 Ground bonding screw                             |
| 3 External battery module (EBM) detection port        | 8 (2) 5-20R and (1) L5-30R managed outlets (primary group) | 12 L5-30P input cord (8-foot long)                  |
| 4 NETWORK-M2 card (optional)                          | 9 (2) 5-20R managed outlets (load segment group 1)         | 13 AC output branch protector                       |
| 5 EBM connector                                       |  |   |

For additional rear panel views, please visit [Eaton.com/9PX](http://Eaton.com/9PX).

## 9PX lithium-ion rackmount and tower model selection guide

The 9PX lithium-ion comes as a stand-alone UPS or as part of a network bundle for easy configuration and deployment. For complete specifications, including interactive battery runtime graphs, visit [Eaton.com/9PX](http://Eaton.com/9PX).

### 120V (default), 100V, 110V, 115V, 125V RT models

Catalog number	Rating (VA/Watts)	Input connection	Output connections	Dimensions (H x W x D), in.	Weight, lb.
9PX1500RT-L	1500 / 1350	5-15P, 8 ft.	(8) 5-15R	3.41 (2U) x 17.32 x 17.72	35.5
9PX2000RT-L	2000 / 1800	5-20P, 8 ft.	(1) L5-20R, (6) 5-20R	3.41 (2U) x 17.32 x 23.83	50.6
9PX3000RT-L	3000 / 2400	5-30P, 8 ft.	(1) L5-30R, (6) 5-20R	3.41 (2U) x 17.32 x 23.83	52.7

### Global UPS, 208V (default), 230V, 240V RT models

Catalog number	Rating (VA/Watts)	Input connection	Output connections	Dimensions (H x W x D), in.	Weight, lb.
9PX1500GRT-L	1500 / 1350	C14	(8) C13	3.41 (2U) x 17.32 x 17.72	34.8
9PX2200GRT-L	2200 / 2000	C20 / L6-20P	(8) C13, (2) C19	3.41 (2U) x 17.32 x 23.83	48.6
9PX3000GRT-L	3000 / 2400	C20 / L6-20P	(8) C13, (2) C19	3.41 (2U) x 17.32 x 23.83	50.2

### 120V (default), 100V, 110V, 115V, 125V RT network card bundles

Catalog number	Rating (VA/Watts)	Input connection	Output connections	Dimensions (H x W x D), in.	Weight, lb.
9PX1500RTN-L (includes NETWORK-M2 network card)	1500 / 1350	5-15P, 8 ft.	(8) 5-15R	3.41 (2U) x 17.32 x 17.72	36.5
9PX2000RTN-L (includes NETWORK-M2 network card)	2000 / 1800	5-20P, 8 ft.	(6) 5-20R, (1) L5-20R	3.41 (2U) x 17.32 x 23.83	51.6
9PX3000RTN-L (includes NETWORK-M2 network card)	3000 / 2400W*	L5-30P, 8 ft.	(6) 5-20R, (1) L5-30R	3.41 (2U) x 17.32 x 23.84	53.7

\*2400W at 100% load for UPS only; 2700W at 100% load for UPS + EBMs

## 9PX lithium-ion extended battery module options

Catalog number	Description	Rack size	Weight, lb.
9PXEBM48RT-L	Extended battery module for 9PX1500RT-L and 9PX1500GRT-L	1U	36.5
9PXEBM72RT-L	Extended battery module for 9PX2000RT-L, 9PX2200GRT-L, 9PX3000RT-L and 9PX3000GRT-L	1U	46.6

## 9PX lithium-ion power distribution (PDU) and maintenance bypass (MBP) options

Catalog	Description	Input connection	Output connections	Dimensions (H x W x D), in.
EHBPL1500R-PDU1U	HotSwap MBP for use with 9PX1500RT-L, 9PX1500GRT-L	5-15P	(6) 5-15R	2.1 (2U) x 17.3 x 3.8
EHBPL2000R-PDU1U	HotSwap MBP for use with 9PX2000RT-L, 9PX2200GRT-L	5-20P	(6) 5-20R	2.1 (2U) x 17.3 x 3.8
EHBPL3000R-PDU1U	HotSwap MBP for use with 9PX3000RT-L, 9PX3000GRT-L	L5-30P	(5) 5-20R	2.1 (2U) x 17.3 x 3.8
ePBZ71	Basic 2 kVA, 120V, 0U rackmount PDU	5-20P / L5-20P	(30) 5-20R	72 (0U) x 1.5 x 1.5
ePBZ78	Basic 3 kVA, 120V, 0U rackmount PDU	L5-30P	(20) 5-20R	1.7 (1U) x 17 x 5.1
ePBZ93	Basic 3 kVA, 208V, 0U rackmount PDU	L6-20P	(20) C13, (4) C19	35 (0U) x 1.9 x 2.4
ePBZ90	Basic 3 kVA, 120V, 0U rackmount PDU	L5-30P	(24) 5-20R	40 (0U) x 1.9 x 2.1

Catalog number	Description
NETWORK-M2	Gigabit Network Card
EMPDT1H1C2	Environmental Monitoring Probe (EMP) Gen 2 for use with NETWORK-M2
RELAY-MS	Relay / Serial Interface Card
Mounting Hardware	
RK2PA	1U two-post rail kit (optional for EBM)
RK2PC	2-post rack mounting rail kit (one kit required for each UPS)
BINTSYS	Battery integration – vertical mounting platform with wheels

\*For additional Eaton PDU options, please visit [Eaton.com/RackPDUSelector](http://Eaton.com/RackPDUSelector)

## Lithium-ion vs lead-acid

Characteristic	VRLA (lead-acid) battery	Lithium-ion battery	Lithium-ion benefit
Average battery lifespan	3–5 years	8-10 years	<b>2–3x longer life</b>
Weight	43–86 lb.	34.8–52.7 lb.	<b>20% lighter UPS, 40% lighter EBM</b>
EBM footprint	2U	1U	<b>Increased U space for critical equipment</b>
Warranty	2 years	5 years	<b>2.5x warranty coverage</b>
Battery replacement cost	\$650*	\$0	<b>Reduced TCO</b>

\*Battery and labor cost for one replacement



2U UPS with 1U EBM in 4-post rack



Eaton's Gigabit Network Cards adds advanced advanced control with IPM software allows for remote management and integration into leading virtualization platforms  
**Eaton.com/intelligentpower**

To view battery runtimes and interact with the Eaton 9PX lithium-ion UPS, please visit: [Eaton.com/9PX](https://Eaton.com/9PX)

**Eaton**  
1000 Eaton Boulevard  
Cleveland, OH 44122  
United States  
[Eaton.com](https://Eaton.com)

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Printed in USA  
Publication No. BR153145EN / GG  
April 2021

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