

# 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 1.5 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). It improves power system reliability by providing warnings of pending issues and helping to perform orderly graceful shutdown of servers and storage.

# 9PX Li-ion battery

9PX Lead-acid battery

# **Battery lifespan**



up to 8 to 10 years

average 3 to 5 years

### Weight



EBM battery is 40% lighter

#### 29.8kg

### **Footprint**

1U



# Warranty



5 year warranty (2.5x the warranty coverage of the 9PX lead-acid UPS)

#### 3 year warranty

## Recharge time



Significantly faster than Lead-acid

Up to 90% in 3 hours

# The first UPS connectivity device to meet both UL and IEC cybersecurity standards.

Eaton's Gigabit Network Cards (NETWORK-M2) adds advanced control with IPM software, allows for remote management and integration into leading virtualization platforms **Eaton.au/intelligentpower** 

# Advanced protection for applications such as



# Key features and benefits

# Save money:

- 2-3X longer battery life: minimize battery maintenance expense — ideal for large deployments and edge applications
- Runtime: UPS with internal batteries provides up to double the runtime at typical loads compared to equivalent VRLA models
- 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 leadacid 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



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



2U UPS in 4-post rack



# Lithium-ion battery

### Why lithium?

Lithium-ion chemistry demonstrates superior characteristics in UPS applications, this results in high energy density, long life, flexible installation, improved cycle life and a lower TCO.

#### **Backup battery runtimes**

Contact Eaton for backup times and configurations. A wide range of runtimes from 3 minutes to an hour + are available.

#### Management and monitoring system

The lithium-ion battery integrates a powerful battery management system (BMS), providing cell protection (temp, current, over/under voltage), cell balancing, state of charge and health and alarms/reports.

#### **Protection**

The BMS processes critical parameters such as voltage levels, temperature, and current at the module and solution levels. Abnormal conditions (warnings and alarms) are quickly detected and, if necessary, the BMS will protect the system from damage by disconnecting the affected battery.

### Performance optimisation:

The BMS incorporates cell and module balancing controls. This function optimises the voltages of each module to maximise performance and increase service life.

For more information on Lithium-ion battery, visit Eaton.au/Lithium

# Rear panel overview

# 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.au/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 protocolbased 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.au/VPM

# PredictPulse<sup>™</sup> 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 propriety algorithms, based on data from thousands of installed devices to predict UPS component failure and proactively replace parts before issues arise.

For more information, please speak with a Eaton representative.

#### Model 9PX1500IRTANZ-L



- Output relay port
- Remote power off (RPO) and remote on/off (ROO) port
- External battery module (EBM) detection port
- NETWORK-M2 card (optional)
- EBM connector
- RS-232 serial communication port (cable included)
- USB port (cable included)
- (4) C13 managed outlets (primary group)
- (2) C13 managed outlets (load segment group 1)
- (2) C13 managed outlets (load segment group 2)
- Ground bonding screw
- C14 (10A male) AC input

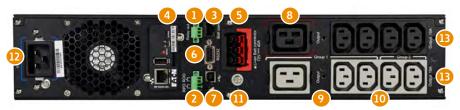
#### Model 9PX2000IRTAU-L



- Output relay port
- Remote power off (RPO) and remote on/off (ROO) port
- External battery module (EBM) detection port
- NETWORK-M2 card (optional)
- 5 EBM connector

- RS-232 serial communication port (cable included)
- USB port (cable included)
- (4) C13 managed outlets (primary group)
  - (2) 10A ANZ GPO managed outlets (load segment group 1)
- (2) C13 manage
  - managed outlets (load segment group 2)
- Ground bonding screw
- C14 (10A male) AC input

#### Model 9PX3000IRTANZ-L



- Output relay port
- Remote power off (RPO) and remote on/off (ROO) port
- External battery module (EBM) detection port
- 4 NETWORK-M2 card (optional)
- EBM connector
- RS-232 serial communication port (cable included)
- USB port (cable included)
- (1) C19 + (4) C13 managed outlets (primary group)
- (1) C19 + (2) C13 managed outlets (load segment group 1)
- (2) C13 managed outlets (load segment group 2)
- Ground bonding screw
- C20 (16A male)
  AC input
- AC output branch protector

# Eaton 9PX Lithium-ion **UPS** technical specifications

Technical specifications	1500		2000		3000			
Rating (VA/W)	1500VA/1500W		2000VA/1800W	1	3000VA/2400W	(3000VA/3000W with EBM)		
Format	RT2U (tower/rac	RT2U (tower/rack 2U						
Electrical characteristics								
Technology	On-line double c	On-line double conversion with Power Factor Correction (PFC) system						
Nominal voltage	200/208/220/23	200/208/220/230/240V						
Input voltage range	176-276V withou	176-276V without derating (up to 100-276V with derating)						
Input frequency range	40-70Hz, 50/60H	40-70Hz, 50/60Hz autoselection, frequency converter mode						
Efficiency		up to 92.5% in online mode (up to 97.5% in Hi-efficiency mode)		up to 93.5% in online mode (up to 98% in Hi-efficiency mode)		up to 94% in online mode (up to 98% in Hi-efficiency mode)		
Connections								
Input	1 IEC C14 (10A)		1 IEC C14 (10A)		1 IEC C20 (16A)	1 IEC C20 (16A)		
Outputs	8 IEC C13 (10A) s	sockets	6 IEC C13 (10A)	+ 2 ANZ GPO (10A) sockets	8 IEC C13 (10A)	sockets + 2 IEC C19 (16A) sockets		
Switched outlet group	2 outlet groups							
Batteries								
Typical backup times*	300W	500W	800W	1200W	1800W	2400W		
9PX 1500	45	30	20	13				
9PX 1500 + 1 EBM/4EBM	114/321	76/210	52/145	33/92				
9PX 2000	66	45	30	21	14			
9PX 2000 + 1 EBM/4EBM	170/475	112/305	78/205	52/148	35/98			
9PX 3000	68	46	30	21	14	10.5		
9PX 3000 + 1 EBM/4EBM	184/516	120/320	80/215	54/153	37/104	28/78		
Battery	Lithium-ion batte	Lithium-ion battery (LFP) with 8 to 10 years service life, automatic recognition of external battery modules (EBM)						
Communication								
Communication ports		USB port + 1 serial RS232 port + 1 mini-terminal block for remote ON/OFF + 1 mini-terminal block for remote power off     + 1 mini-terminal block for output relay						
Communication slot	1 slot for Gigabit	1 slot for Gigabit Network management card, Industrial Gateway Card (Modbus TCP/RTU), or Relay card.						
Operating conditions, standards and								
Operating temeprature	0 to 40°C							
Typical noise level	35dB		40dB					
Safety	IEC/EN 62040-1,	IEC/EN 62040-1, UL 1778, CSA 22.2						
EMC	IEC/EN 62040 -2	IEC/EN 62040 -2, FCC Class B, CISPR22 Class B						
Approvals & markings	CE/CB report (TU	CE/CB report (TUV)/ EAC/Energy Star/RCM						
Dimensions H x W x D in mm/ weigh	nt		,					
	1.5kVA	1.5kVA		2.0kVA		3kVA		
UPS	86.5x440x450/15	86.5x440x450/15.8Kg		86.5x440x605/22.1Kg		86.5x440x605/22.8Kg		
EBM	42.9x438x448/12	42.9x438x448/12Kg		42.9x438x603/17.4Kg		42.9x438x603/17.4Kg		
Customer service and support						<u> </u>		
Warranty	5 years full warr	5 years full warranty (eletronics, internal batteries and EBM)						

<sup>\*</sup> Backup times are approximate and may vary with equipment, configuration, battery age, temperature, etc.

Parts numbers*	1.5kVA	2.2kVA	3kVA	
UPS RT2U	9PX1500IRTANZ-L	9PX2000IRTAU-L	9PX3000IRTANZ-L	
EBM RT1U	9PXEBM48RT1U-L	9PXEBM72RT1U-L	9PXEBM72RT1U-L	

<sup>\*</sup>All 9PX Lithium-ion UPS and EBM are delivered with rack kit

# To view battery runtimes and interact with the Eaton 9PX lithium-ion UPS, please visit: Eaton.au/9pxliion

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