



**WISH I RAN ON
LITHIUM-ION
BATTERIES**



Transform your power infrastructure with lithium-ion batteries

While valve regulated lead-acid (VRLA) batteries have long been the industry choice for uninterruptible power supplies (UPSs), lithium-ion batteries offer additional benefits while still meeting required backup runtime.

Lithium-ion batteries are poised to become the preferred choice for UPSs in IT applications. The batteries last longer and recharge faster, saving time, saving money and reducing risk throughout the lifecycle of the UPS. The benefits of this lightweight solution well justify the upfront investment.

Not all batteries are created equal

There are many different types of lithium-ion battery chemistries available in the market. Eaton utilizes lithium iron phosphate (LiFePO₄) chemistry that creates a stable and safe battery for UPS applications. This chemistry does not create oxygen as an off-put should there be a thermal event, eliminating the harsh igniting potential of some lithium-ion battery chemistries.

Safety benefits

- LiFePO₄ battery chemistry is stable and safe
- Battery management system (BMS) actively monitors temperature and charge cycles
- Common vendor for battery and BMS improves integration and safety

Installation benefits

- Save money on battery replacement costs
- Up to 40% weight reduction eases installation
- Shift your refresh cycle to be in line with your IT equipment

Performance benefits

- 2–3X longer life allows you to set it and forget it
- 2–3x longer runtime at full load
- Up to 3X faster charge improves recovery
- BMS provides up-to-date insight into battery performance



Powering Business Worldwide

By the numbers: 5P lithium-ion UPS

Characteristic	VRLA battery	Lithium-ion battery	Lithium-ion benefit
Average battery life span	3–5 years	8 years	2x longer life
Recharge time (from 0% to 90% runtime capacity)	24 hours	6–8 hours	3x faster recovery
Battery weight	19 lbs.	11 lbs.	40% lighter weight
Battery replacement cost	\$520*	\$0	\$0 OpEx expenditure
Warranty	3 years	5 years	1.7X warranty coverage

*Battery and labor cost for one replacement



By the numbers: 9PX lithium-ion UPS

Characteristic	VRLA battery	Lithium-ion battery	Lithium-ion benefit
Average battery life span	3–5 years	8–10 years	2–3x longer life
Weight	43–86 lbs.	34.8–52.7 lbs.	20% lighter UPS, 40% lighter EBM
EBM footprint	2U (1–3 kVA) 3U (6 kVA)	1U (1–3 kVA) 2U (6 kVA)	Increased U space for critical equipment
Warranty	3 years	5 years	1.7x warranty coverage
Battery replacement cost	\$650* (1–3 kVA models) or \$1000* (6 kVA models)	\$0	Reduced TCO

*Battery and labor cost for one replacement



9PX lithium-ion UPS rack/tower available in 1–6 kVA



9PX 2U UPS with 1U EBM in 4-post rack

Stay connected — the Brightlayer Data Centers suite

The power of automation.

For organizations with up to 25 UPSs, our Intelligent Power Manager (IPM) disaster avoidance software will allow you to create triggering alerts and automate resolutions to keep applications running. The software enables you to:

- Leverage.** Eaton's integrations with industry leaders such as VMware, Microsoft and VirtualBox
- 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](https://www.eaton.com/IPM)

The power of control.

With our Distributed IT Performance Management (DITPM) software, you can remotely monitor and control tens to thousands of PDUs and UPSs — no matter where they're located. The software enables you to:

- Know** what's happening with real-time reports, trend charts, dashboards and alerts that are prioritized by severity and escalated when unacknowledged to speed resolution
- Troubleshoot and resolve** issues by remotely controlling your assets, automating device response and/or shutdown during critical power events or environmental stress conditions, and diagnosing equipment performance
- Update** Eaton firmware remotely to improve cybersecurity and eliminate the need for in-person updates

[Learn more at Eaton.com/DITPM](https://www.eaton.com/DITPM)

The power of predictive.

Our remote monitoring service, also known as PredictPulse, is a cloud-based 24x7 remote monitoring and predictive analytics subscription service that forecasts data center power component failure and enables the proactive replacement of components to increase uptime. This service enables you to:

- Focus** on other critical IT tasks while our experts remotely monitor your IT infrastructure power quality equipment around the clock and dispatch field service technicians when needed
- Significantly reduce** surprise maintenance expenses when the service is bundled with an extended warranty, which includes parts, labor, ongoing preventive maintenance and expedited repairs
- Predict** UPS component failure so we can proactively replace parts before issues arise with propriety algorithms based on data from thousands of installed devices

[Learn more at Eaton.com/RemoteMonitoringService](https://www.eaton.com/RemoteMonitoringService)

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