

Lithium-ion UPS battery power on demand

Eaton's LXP-P series power batteries utilize lithium iron phosphate chemistry for the ultimate in safety and performance for UPS applications. LXP-P systems provide a reliable and flexible solution that ensures 24/7 system uptime while delivering high power density and low total-cost-of-ownership when compared with lead acid and other lithium-ion alternatives. Capable of providing mega-watts of power and typical UPS runtimes in a small footprint, this Narada-built battery solution is comprised of lightweight battery cabinets that arrive with batteries installed and are designed to seamlessly work with a Power Xpert 9395 series, for a mission critical support and applications such as Eaton's EnergyAware energy management system.

Why power lithium instead of lead acid?

Lithium-ion chemistry demonstrates superior characteristics in UPS applications, this results in high power density, long 10-year life, flexible installation, improved cycle-count capacity life and a lower TCO.

Battery backup runtimes

Contact Eaton for specific backup times and configurations. Runtimes can range from 5 to 20 minutes depending on the UPS capacity.

Management and monitoring system

The lithium-ion battery integrates a powerful battery management system (BMS), providing cell protection (temperature, current, over/under voltage), cell balancing, state of charge, state of health and alarms. The optional Lithium communicator module (LCM) provides a monitoring that system features integrated logging of battery performance data and alarm/event histories. Users can communicate directly with the lithium communicator module for interface with their building management software and create permanent records of environmental conditions over time.


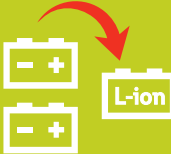

Protection: The built-in BMS is internally powered, and processes critical parameters such as voltage levels, temperature, and current at the module, cabinet and system levels. Abnormal conditions (warnings and alarms) are quickly detected and, if necessary, the BMS will protect the system from damage by disconnecting the affected battery string.

Performance optimization: The BMS incorporates cell and module balancing controls. This function optimizes the voltages of each module to maximize performance and increase service life.

HMI interface: The door-mounted HMI display shows battery metering and system status at a glance.



Benefits of lithium-ion power batteries

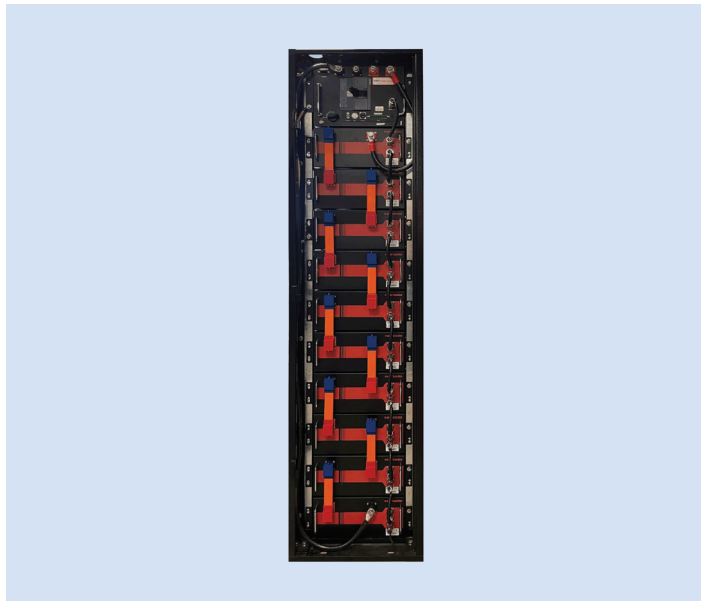
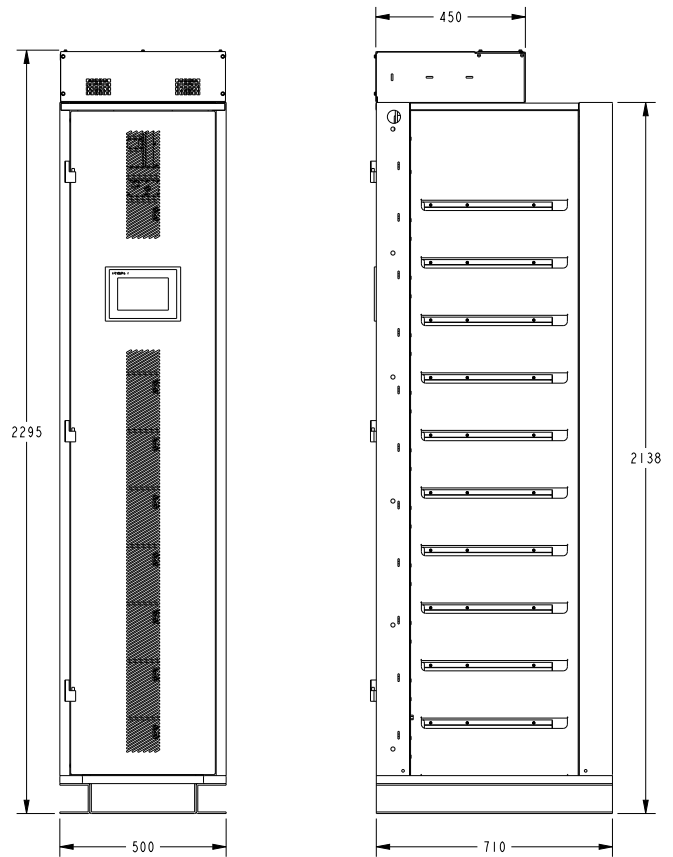
<p>Save money</p>	<p>Cabinets ship with batteries installed</p> <p>15 year design life</p> <p>Lower cost per minute</p> 
<p>Save space</p>	<p>More charge/discharge cycles vs. traditional UPS batteries</p> <p>Higher power density minimizes UPS system footprint</p> <p>40% smaller</p> <p>60% lighter</p> 
<p>Reduce risk</p>	<p>LiFePO₄ chemistry for safety</p> <p>24/7 BMS management</p> 

TECHNICAL SPECIFICATIONS¹ LXP-P Single string cabinet

Part number	Configured by Eaton CTO
Modules / string	10
Module (Ah)	55
Nominal voltage	512VDC
Low voltage cutoff level	468VDC
Float voltage	571VDC
Capacity	28kWh
Nominal discharge power (kW)	185
Remote communications	Modbus TCP or web page via Lithium Communicator (LCM) option
Battery chemistry	Lithium iron phosphate (LFP) LiFePO4
Dimensions (HxWxD)	90.3"x19.7"x28" (2295mm x 500mm x 710mm)
Packaged dimensions (HxWxD)	2258mm x 640mm x 740mm
Weight (installed)	1188 lbs. (540 kg)
Seismic qualified	Yes; seismic mounting kit optional
DC cable terminations	2-hole lugs; top entry
Cabinet breaker rating	400
Continuous charge current	55
Operating temperature range	59–95 deg F; 15–35 deg C*
Storage temperature range	32–104 deg F; 0–40 deg C
Operating and storage humidity	5–95% non condensing
Shelf life before re-charge	6 months
Safety certifications	UL 1973, UL9540A tested
Shipping certifications	Class 9, UN 38.3
Ships with batteries installed	Yes

1. Specifications subject to change without notice. * To maintain 10 year performance warranty

DIMENSIONS H x W x D in (mm)



Eaton LXP-P cabinet ships complete with batteries installed



2 cabinets in parallel – maximum 8 parallel cabinets total

For more information, please visit [Eaton.com/Lithium](https://www.eaton.com/Lithium)