

Eaton batteries line card



Why choose Eaton batteries?

Battery update services: Turnkey battery replacement services that include new batteries, installation of new batteries, removal and EPA approved **disposal of old batteries and freight**. Also, additional cabinets to provide increased reliability and runtime.

Battery maintenance services: Whether it's monthly, quarterly, semi-annual or annual, we perform all maintenance per IEEE and manufacturer's specifications.

Battery acceptance testing: Acceptance testing should be performed upon the installation, as determined by the user. This test validates the batteries will perform per the manufacturer's specifications.

Battery monitoring: Today's critical environment demands maximum uptime. A permanently installed battery monitoring system for measuring, storing, and reporting battery operating parameters maximizes uptime. Remote monitoring is also offered.

Eaton batteries: Three years of parts coverage with full (not pro-rated) replacement of any failed battery. If a battery fails within the first year, an Eaton authorized technician will install the replacement battery on-site at no charge. Optional labor warranty for three years is available. Eaton has regional stocking locations strategically located for rapid deployment of new batteries that are tested and approved for use in Eaton systems.

Expert technical support: Eaton-qualified batteries are backed by our network of trained and qualified battery technicians. Post-warranty services include battery monitoring and maintenance plans that take the guesswork and administrative tasks out of battery management.

Easy, safe installation: All field technicians have specialized safety equipment to handle batteries, including extensive arc flash training and full OSHA-approved personal protective equipment. Spill containment kits and safety related items are available.

[Eaton.com/UPSbatteries](https://www.eaton.com/UPSbatteries)

Battery quick facts – did you know?

- ✓ Batteries are a leading cause of UPS load loss
- ✓ One bad battery can ruin an entire string
- ✓ Eaton-qualified batteries are backed by a service network of trained and qualified battery customer service engineers
- ✓ Eaton offers battery preventive maintenance, service plans, Cellwatch remote monitoring and other ancillary services

Eaton battery service and support offerings

Battery service overview

Eaton provides a comprehensive set of services for batteries:

Battery preventive maintenance/ onsite inspection

- Technician tests, inspects, cleans and analyzes battery performance
- Provides a detailed report including recommendations for corrective action

Replacement with Eaton batteries

- Replace individual batteries or whole strings

Customer Support Center

- 24x7 command center for all Eaton services

PredictPulse Insight remote monitoring

- Remote monitoring and management service 24x7
- Predictive analytics to optimize battery replacement cycles and mitigate risk
- Identifies risks of components failing, with Eaton field techs verifying and replacing parts ahead of failures
- Cloud-based monitoring that requires no special wiring or software

[Eaton.com/predictpulse](https://www.eaton.com/predictpulse)

Eaton Cellwatch battery monitoring

- Monitoring of voltage, internal resistance and temperature with optional remote monitoring available)
- Immediate warning and specific battery identification of deterioration and imminent failure—reducing possibility of damage to entire battery string
- Replacement based on actual battery condition, preventing costly premature replacement
- Minimum of 120 days of activity history that enables trending of individual battery and string performance
- Continuous monitoring of string and battery discharge currents from 25A to 1000A
- May be used to detect thermal runaway in advance

Why Eaton UPS Battery PMs? Extra peace of mind . . .

- **Accountability:** Single vendor for UPS, battery system, and maintenance
- **Trusted partner:** Sustained 99% customer satisfaction rating
- **Expertise:** Eaton CSEs work exclusively on Eaton UPS and battery systems and have an average tenure of 10+ years. Eaton CSEs are trained extensively to follow procedures which are UPS model specific, even for Battery PMs
- **Responsiveness:** Eaton CSE carry van stock of genuine Eaton UPS parts and have immediate and direct access to factory inventory for both UPS parts and batteries
- **Site safety:** Part of Eaton's DNA. Eaton CSEs wear all required PPE and follow all OSHA & NFPA guidelines for safety

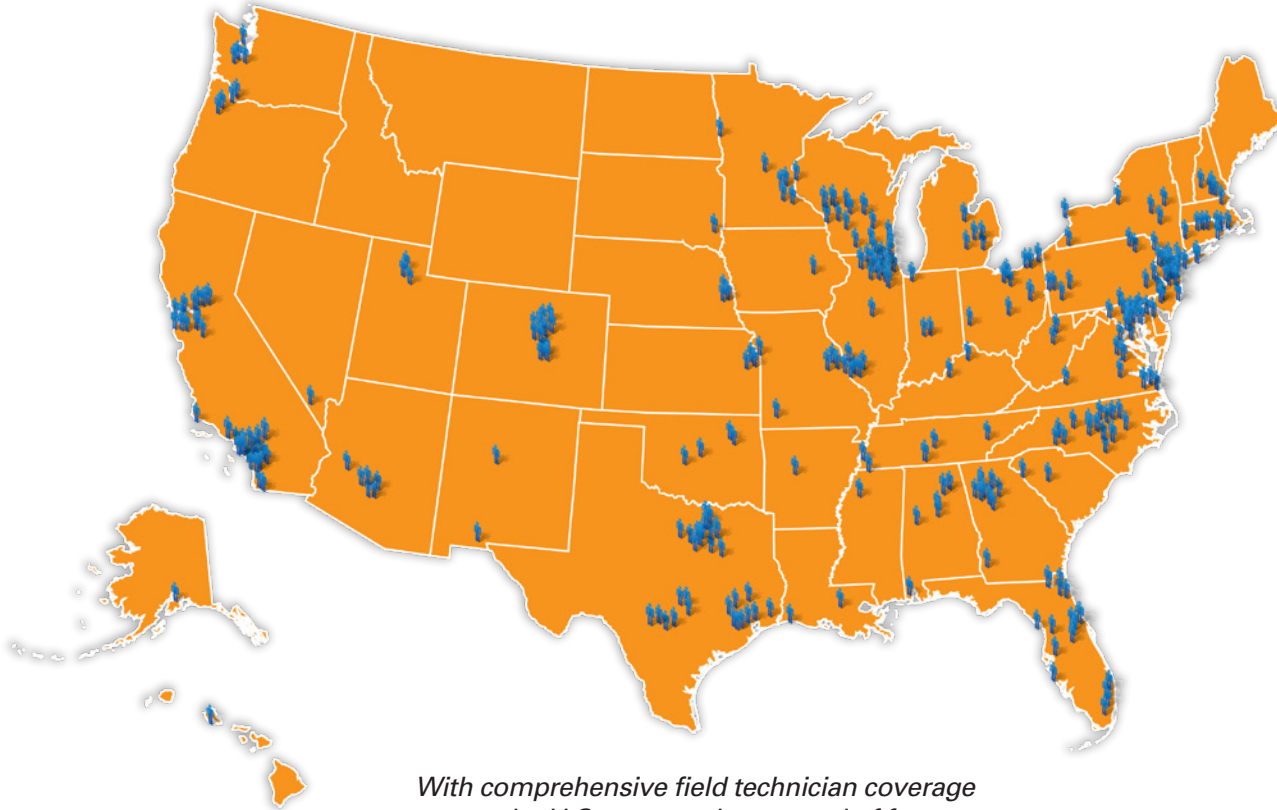


Battery room

Inspection Data												
CABINET	Volts		Load		Specific			Micro-Ohms			Inter	Status
	Unit	Float	Open	Open	End	Resistance	Temp	Gravity	Post 1	Post 2		
Tray 1												
Str 1	13.302					5436.000	74.8		235.000			OK
Str 2	13.325					6551.000	74.8		198.000			OK
Str 3	13.351					5628.000	74.8		234.000			OK
Str 4	13.377					6687.000	74.8		11.000			OK
Tray 2												
Str 1	13.428					5284.000	74.8		262.000			OK
Str 2	13.453					6350.000	74.8		238.000			OK
Str 3	13.478					5473.000	74.8		280.000			OK
Str 4	13.503					5688.000	76.5		14.000			OK
Tray 3												
Str 1	13.491					5098.000	76.5		205.000			OK
Str 2	13.515					3888.000	76.5		208.000			OK
Str 3	13.540					4288.000	76.5		292.000			OK
Str 4	13.475					6542.000	74.5		9.000			OK
Tray 4												
Str 1	13.500					6300.000	74.8		245.000			OK
Str 2	13.525					7020.000	86.4		304.000			X
Str 3	13.550					4771.000	74.8		193.000			OK
Str 4	13.627					4522.000	72.0		12.000			OK

Sample battery preventative maintenance inspection report

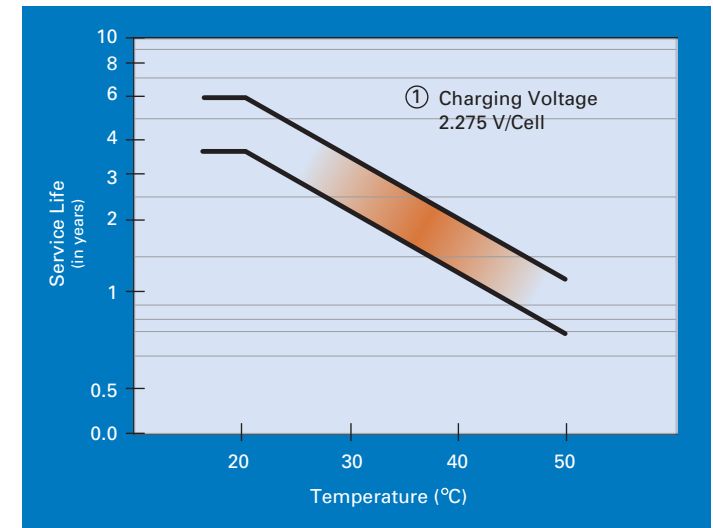
US coverage



With comprehensive field technician coverage across the U.S., you can be assured of fast response times and readily available support.

Battery service life

Trickle (or float) service life



Temperature ranges can drastically impact the service life of your batteries

IEEE recommends replacement of batteries with less than

80%

capacity to ensure maximum reliability and uptime

For more information on Eaton batteries, service and support, please visit

Eaton.com/UPSbatteries

or call 1.800.843.9433



Powering Business Worldwide

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