# 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.

# 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.com/UPSbatteries** 



**Service matters.**Maximize the reliability of your UPS.

# 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

Inspection Data												
CABINET 2 Unit	Volts		Load				Specific	Micro-Ohms			Inter	
	Float	Open	Open	End	Resistance	Temp	Gravity	Post 1	Post 2	Post 3	Tier	Status
Tray 1												OK
Jar 1	13.302				5436.000	74.8		223.000				OK
Jar 2	13.325				5551.000	74.8		198.000				OK
Jar 3	13.251				5628.000	74.8		234.000				OK
Jar 4	13.277				5687.000	74.8		11.000				OK
Tray 2												OK
Jar 1	13.429				5264.000	74.8		262.000				OK
Jar 2	13.409				5300.000	74.8		233.000				OK
Jar 3	13.398				5478.000	74.8		280.000				ОК
Jar 4	13.387				5688.000	76.5		14.000				OK
Tray 3												OK
Jar 1	13.481				5098.000	76.5		205.000				OK
Jar 2	13.593				3889.000	76.5		208.000				OK
Jar 3	13.542				4288.000	76.5		292.000				OK
Jar 4	13.476				5542.000	74.5		9.000			Г	ОК
Tray 4											Г	ОК
Jar 1	13.560				4300.000	74.5		249.000				ОК
Jar 2	13.150				30122.000	85.4		304.000				X
Jar 3	13.532				4771.000	74.8		193.000				OK
Jar 4	13.627				4522.000	72.0		12.000				OK

Sample battery preventative maintenance inspection report

# 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

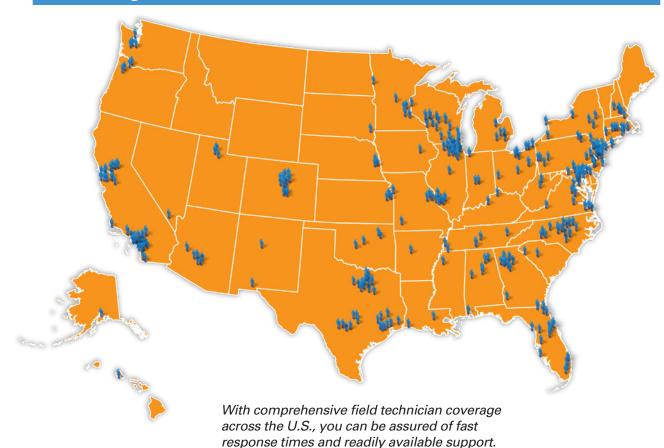
# Why Eaton UPS Battery PMs? Extra peace of mind . . .

- 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



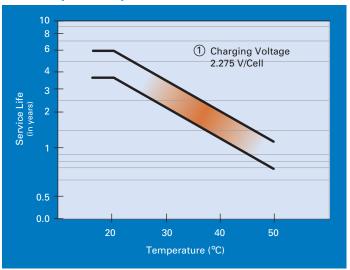
**Battery room** 

### **US** coverage



### Battery service life

### Trickle (or float) service life



Temperature ranges can drastically impact the service life of your batteries

of batteries with less than

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



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