

# Battery Services with Ntegrated Monitoring™

Keeping Your Critical UPS Battery Systems Working



# A Comprehensive Solution Maximizes Battery Performance

When an alarm occurs, a specially trained HARC technician will diagnose the condition and determine the proper action.



## Why Your System Needs It

Your UPS system relies on fully functioning batteries. By optimizing their performance, you can ensure the smooth operation of your system. Batteries have a finite lifespan and are prone to failure when you least expect it unless proper precautions are taken. Approximately 37% of all UPS failures are battery related, and the only way to offset the risk of failure is to implement an integrated service plan which utilizes battery monitoring.

**It's impossible to know when a failure is imminent, unless you're monitoring your batteries continuously.**

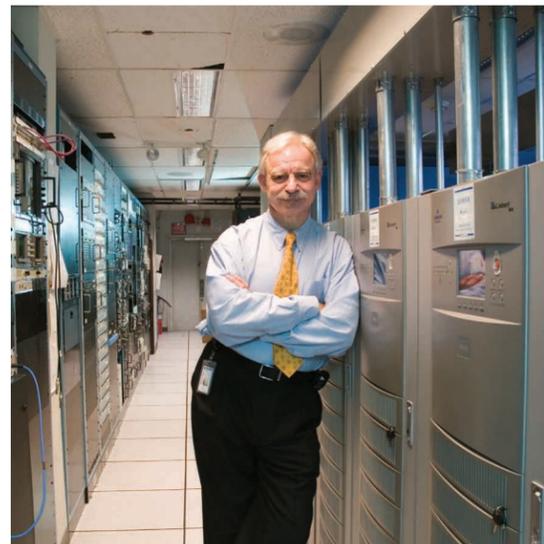
## How It Works

The Liebert High Availability Response Center (HARC) is the resource watching your batteries—**around the clock**. But it's more than just watching, it optimizes the life of your UPS battery systems by:

- Analyzing and tracking performance.
- Anticipating problems.
- Predicting potential failure.
- Watching the condition of your batteries in real time.
- Ensuring the availability of your facility's power system.

When you have Battery Service with Integrated Monitoring, we will always know your battery's current, true condition. If a problem is developing, we'll respond before it causes downtime. If a battery fails, we'll act immediately to tell you not only what the problem is, but also how we're fixing it.

**By anticipating battery problems before they can occur, we'll work with you to minimize the risk of downtime.**



## More Than Monitoring—A Complete Solution

When you have Battery Service with Integrated Monitoring, you gain a comprehensive maintenance program carried out by our highly trained Customer Engineers and HARC technicians. By combining on-site visits with trending and diagnostics, we can identify problems before they become serious. Our centralized HARC technicians are highly skilled in analyzing operating data and making well-informed decisions that increase battery availability.

### Proactive Maintenance

Through proactive analysis and on-site visits, our experts analyze and trend your battery data to maximize system health and increase uptime. We optimize battery life by making informed decisions about full string battery replacement decisions beyond the battery date code.

## Identifying Problems Before They Become Serious

Battery testing is the key to optimizing performance. As we carry out these battery tests, we will analyze the data and give a monthly summary of our findings to you along with a recommended course of action. These reports will help keep you informed about the day-to-day operation of your battery system and give you a deeper understanding of the health of your system. With this information, we will work with you to proactively prepare for battery replacement.

# Ensuring Peak Performance

Are your UPS batteries reliable?



## Integrating Albér Technologies

Through advanced Albér battery monitoring technology, all critical battery parameters are continuously diagnosed, including cell voltage, internal resistance and temperature.

Maintaining a continuous pulse on your system through Albér battery monitoring technology, provides up-to-the-minute data on your battery system's condition. This data is recorded, stored, evaluated and trended to identify any anomalies. This allows us to address problems before they lead to failure. Furthermore, Ntegrated Monitoring uses TCP/IP technology to provide monitoring and data retrieval from your Albér equipment. Enabling access to critical alarm types makes problems easier to diagnose and maximizes availability.

## Advanced Albér Battery Monitoring Technology

Liebert Services is deeply committed to the success of your batteries. To that end, we've integrated Albèr technology, providing over 35 years of experience as the leader in UPS battery testing and monitoring technology. This proven approach will minimize battery failure, optimize useful battery life, reduce on-site maintenance and increase safety for your batteries.

This makes measurement technology the more important consideration when selecting a monitoring system. Other battery monitoring services uses internal ohmic readings become inconsistent as the UPS load varies because of variations in AC ripple on the battery.

### Addressing Alarms with Comprehensive Diagnostics

Every time an alarm occurs there is a specific process in order to properly diagnose and restore your battery system.

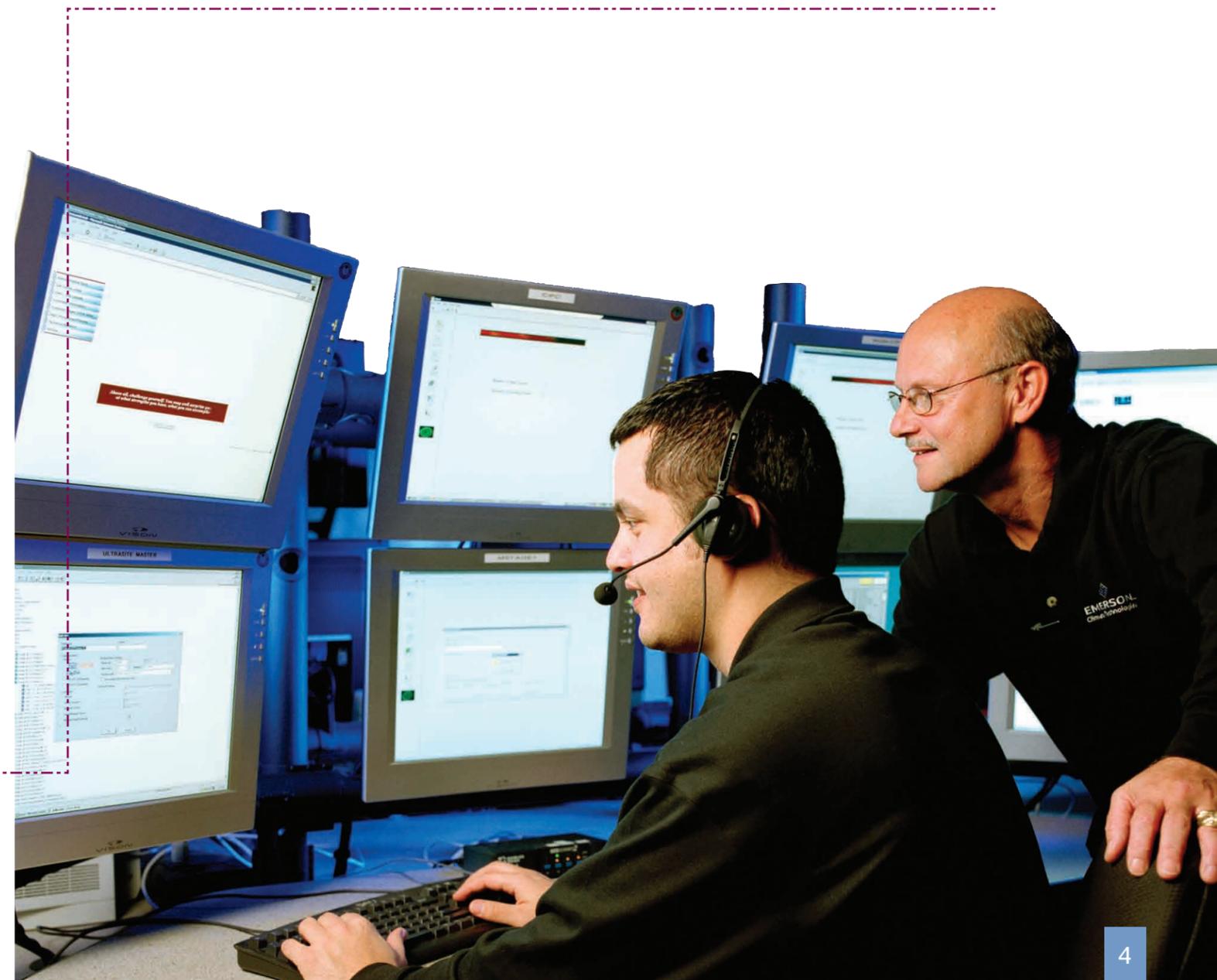
- It is immediately received by the Liebert High Availability Response Center (HARC), which continuously monitors your battery system.
- A specially trained HARC technician will diagnose the condition.
- The engineer will determine whether the situation warrants a service dispatch or a battery replacement.
- The alarm is recorded and entered into our database.

## The Benefits of Alarm Reporting

All alarm and service activity is summarized for you in a monthly status report. The critical information in these reports is used by Liebert Services to pinpoint trouble spots, anticipate battery replacement, and resolve any issues that have your battery system running at less than peak performance.



Sample Report



# No Confusion. No Delay. No Worries.

A Liebert Services technician will respond within a guaranteed response time with Essential or Preferred service levels.

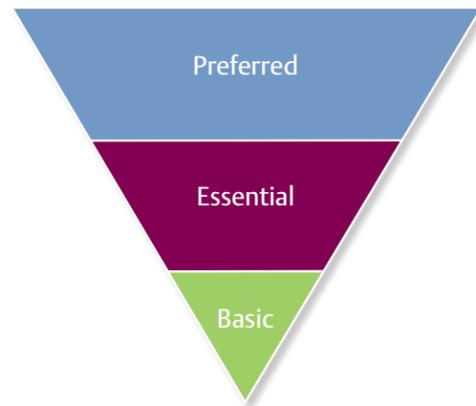


With proper, proactive UPS battery oversight and maintenance provided by Ntegrated Monitoring, your critical business processes can continue uninterrupted, while reducing the risk of sudden failure. Additionally, Liebert Services can reduce your vulnerability to sudden power failure, reduce downtime and ultimately reduce your total cost of ownership. Proper battery management costs are an investment. System downtime would cost you significantly more.

## Preventive Maintenance & Ntegrated Services

The resources provided by Liebert Services watch over your batteries with a frequency and level of detail second to none.

- Preferred - Alarm Notification, 2-Hour Time to Respond, & 24x7x365 Trending Analysis Diagnostic  
2 On-Site / 10 Remote / 12 Reports
- Essential - Alarm Notification & 4-Hour Time to Respond  
2 On-Site / 10 Remote / 12 Reports
- Basic - Alarm Notification  
1 On-Site / 11 Remote / 12 Reports



Every level of service provides critical monitoring and reporting, but Preferred gives you the ultimate in peace-of-mind with advanced trend analysis that ensures the lifespan of your batteries. This highest level of monitoring is unparalleled in preventing problems, minimizing downtime and optimizing battery life.

	BASIC	ESSENTIAL	PREFERRED
24x7x365 Trend Analysis & Diagnostics			✓
10% Battery Replacement		✓	✓
Customer Services Network	✓	✓	✓
Firmware Upgrades		✓	✓
Standard Reporting	✓	✓	✓
Albér Battery Monitoring Systems			
■ BDS-40	✓	✓	✓
■ BDS-256			
■ MPM-100			
Extended System Warranty	✓	✓	✓
Equipment Start-Up	✓	✓	✓

## Proven. Trusted. Reliable.

The batteries that power your UPS system protect the continuity of your business-critical operations. And Liebert Services protects the continuity of those batteries. Our industry-leading technical support and service response team has years of monitoring and service experience. You are backed by the confidence of knowing this team is working for you.

Liebert Services brings you a time-tested record of performance. Our on-site response time averages under 2 hours. For this and other reasons, nearly 100 percent of our customers recommend us.

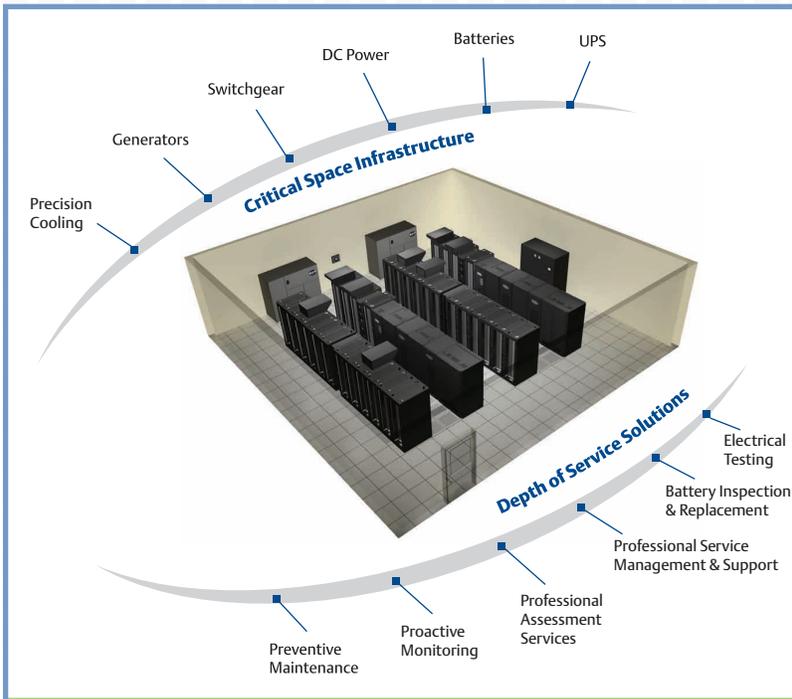
- We have hundreds of certified engineers on staff. Each year, they undergo more than 60,000 total hours of technical training. This team is available 24x7x365 to provide application support to you.
- Our safety record is unparalleled. So is our commitment to training, in everything from low-voltage electric and OSHA lock-out/tag-out to routine safety audits and adherence to ISO standards.
- We offer a comprehensive, advanced logistics support system, with more than 7,000 unique parts stocked. We fill 97 percent of emergency part orders in less than 24 hours, and all parts are fully factory certified.
- At Liebert Services, live professionals are available to take your call when you need us most. Our Customer Resolution Center answers hundreds of thousands of calls per year, with an average resolution time of only two and a half minutes.

It Comes Down To  
*Peace-Of-Mind*



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- 24x7 Customer Resolution Center
- Global Multi-Tiered New Parts Availability

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The global leader in enabling *Business-Critical Continuity™*.

- |                |                      |                              |                               |
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