

# Improve Business Continuity with Easy, Automated In-House Battery Capacity and Internal Resistance Testing

Albér™ BCTI and Albér™ UXIME Enable Data Center Teams to Streamline Testing of Backup Power Supply Batteries

Digital business growth is creating new pressures on the power infrastructures of North American utilities and industrial companies. Uninterruptible power supplies (UPS) play a vital role in maintaining the uptime of organizations' systems during outages but have batteries that must be tested regularly.

Albér™ Battery Capacity Testing Interface (BCTI) and Albér™ Universal Xplorer Industrial Monitor (UXIME) help teams streamline battery testing, meeting regulatory and other requirements and improving business continuity. Here's how.

## Business Continuity is a Challenge for Every Organization

Every organization seeks to ensure high availability of their IT systems and operational equipment. That's especially important in an era of digital business as organizations are:



**Enabling remote work:** Enterprises must maintain IT network uptime to support remote workforces. Similarly, utility power enables the home connectivity required for workers to connect to company resources. Some **25%** of all North American jobs will be remote by the end of **2022**.<sup>i</sup>



**Delivering digital services:** Digital products and services increase competitiveness, power growth, and provide operational and revenue stability in an era of supply chain issues. As a result, **64%** of organizations are planning to launch new digital businesses by **2023**, while **21%** will embed digital technology in their current business model.<sup>ii</sup>



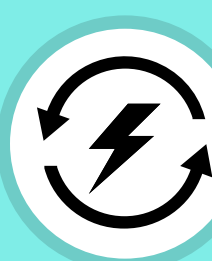
**Connecting equipment:** Industrial organizations, such as manufacturers, energy companies, and utilities, are connecting operational technology (OT) to exploit the vast data wealth it generates. Some **81%** of businesses have connected OT to business systems like SAP, while **56%** have connected their OT to the Internet.<sup>iii</sup>



**Supporting more customers:** Enterprises Organizations such as data centers and utilities may support thousands to hundreds of thousands of customers. As a result, power outages can magnify their impact across a region. The average business loses **\$5,600** per minute of downtime, while **44%** of enterprises will lose **\$1M** or more if an outage lasts an hour.<sup>iv</sup>

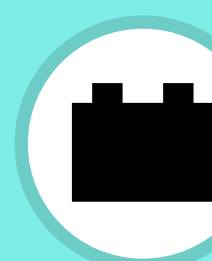
**“1.33 billion hours: Total outage hours in the U.S. in 2020, which were up 73% from 2019, due to extreme weather events and other issues.<sup>v</sup> Businesses lose \$150 billion a year due to outages.<sup>vi</sup>”**

Many organizations are subject to industry regulations and best practices, designed to ensure that they will be able to maintain IT and operational equipment performance in the event of power incidents and issues.



### WHAT THEY MUST DO

Organizations must provide power availability and performance through incidents, such as bad weather, generation and distribution failures, supply shortages, IT device issues, planned maintenance.



### WHAT THEY MUST TEST

Vented lead-acid batteries (VLA) and valve-regulated lead acid (VRLA) batteries used in UPSs and other applications must be tested regularly.



### INDUSTRY REGULATIONS REQUIRE TESTING

North American utilities must meet North American Electric Reliability Corporation (NERC) Reliability Standard PRC-005-05 requirements, which requires the testing of components such as batteries to proactively diagnose problems. This standard affects:

- Power generation utilities with geographically dispersed power producing resources with a capacity greater more than **75 MVA**
- Transmission and distribution entities with facilities operated at or above **100 kV**



### DATA CENTERS TEST AS A BEST PRACTICE

Teams test UPSs at their facilities to meet Institute of Electrical and Electronics Engineers (IEEE) 450 recommendations. This group includes:

- Hyperscalers, cloud service providers, colocation firms, and enterprises

## Vertiv™ Technology Simplifies and Scales Testing Processes

You may already be using Albér UXIME to automate internal resistance testing of stationary batteries. Now, by adding Albér BCTI, you can automate battery capacity testing – and perform all of these processes all in-house.

### ALBÉR™ BCTI AND ALBÉR™ UXIME ARE BETTER TOGETHER!

#### Old Way of Testing Battery Capacity

Rent equipment and perform tests manually or hire third-party companies to bring equipment and test onsite.

Work takes two technicians up to two days to complete.

Testing is completed on set schedules, such as:

- Upon initial battery installation
- Within the first two years
- Annually, up to five years
- Annually, if battery shows signs of degradation or at 85 percent of battery life

#### New Way of Testing Battery Capacity

Seamlessly integrate Albér BCTI and Albér UXIME and perform capacity tests on-site. Albér BCTI handles testing setup and load control, while Albér UXIME collects, processes, and reports data.

Testing is done without requiring monitor connection and disconnection.

Testing can be performed whenever needed because it's so easy to do.

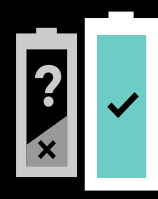
#### PLUS...

If you're not already doing so....

Use Albér UXIME to automate internal resistance testing of batteries, to gain 24/7 monitoring of cell health and ohmic resistance to battery current.

## Gain These Incredible Benefits by Automating Battery Testing

When you automate internal resistance and battery capacity testing with Albér™ BCTI and Albér™ UXIME, you gain a single solution that can perform these tests anytime, anywhere. This integrated solution will help you:



- **Avoid costly outages:** Increase testing frequency to identify battery anomalies. Proactively replacing batteries can help you avoid backup power supply failures that could harm your business and customers.



- **Save time and money:** In-source testing with easy, streamlined processes. For example, there's no longer any need to attach sense leads on each connected cell. With automation, you can reduce testing timeframes from one to two days to **20** minutes.



- **Scale testing operations:** Deploy Albér BCTI and Albér UXIME across your sites and networks for consistently fast, accurate testing processes. Schedule testing when it makes sense for your operations and teams, as there's no longer any need to coordinate with third-party services.



- **Manage battery lifespan proactively:** Change out cells to extend battery lifespans or manage out failing batteries, improving overall UPS performance. With better insights into battery conditions, you'll also be able to right-size battery ordering to meet real needs.



- **Increase technician safety:** With automated processes, technicians no longer need to handle battery conditions. This eliminates the risk of touching live voltage which can harm staff if they're not wearing the right personal protective equipment (PPE).



- **Improve test consistency:** Manual testing approaches can vary across technicians, skewing results. By automating capacity testing, you'll get highly accurate, consistent results you can use to establish battery performance baselines and measure changes over time.

## Automate Your Internal Resistance and Battery Capacity Testing Today!

You can use Albér™ BCTI and Albér™ UXIME to streamline testing processes, gain greater visibility into battery performance, and scale operations at every site you manage. By so doing, you'll be able to deliver the reliable backup power supply and continuous power availability your business and customers require to operate and grow effectively.

### Get started today!

[Learn more about Albér™ Battery Capacity Testing Interface \(BCTI\).](#)