# Albér™ Battery Capacity Testing Interface (BCTI)



CLU/Load Bank

Automating Battery Capacity Testing at Utilities and Industrial Companies

### **Benefits**

- Ensure compliance with NERC standards and IEEE recommended practices
- Save time and money by performing automated processes in-house
- Simplify battery testing processes with an always-available solution
- Gain real-time insight into battery capacity at any time
- Scale testing operations across sites and networks
- Manage battery lifespan proactively, improving business continuity
- Prevent costly outages that harm the customer experience
- Avoid potential fines and penalties from standards violations
- Improve technician safety by eliminating the need to work with live voltage
- Enhance data consistency by using automation to measure and record data

Utilities and industrial companies provide a continuous flow of power to businesses and consumers. They rely on uninterruptible power supplies (UPS) to provide essential backup power when primary power sources are unavailable.

As a result, performing regular capacity testing of the batteries used in UPSs and other applications is an important part of routine maintenance and may also be required by governing bodies. Utilities must test battery capacity to meet North American Electric Reliability Corporation (NERC) Reliability Standard PRC-005-6. Industry data center teams do so as best practice, in line with IEEE 450 recommendations.

Historically, teams have had to hire equipment to perform capacity tests manually or hire external contractors to do so. Now, however, utility and industrial company teams have the ability to automate these tests and perform them in-house, saving time and money while gaining greater visibility into testing data and control over testing process.

Albér™ Battery Control Testing Interface (BCTI) provides automated load testing capacity and integrates seamlessly with Albér™ Universal Xplorer Industrial Monitor (UXIME) solution. That means that data center teams who are using UXIME to perform internal resistance of stationary batteries can simply connect Albér™ BCTI hardware to Albér™ UXIME to begin a test. Albér BCTI handles testing setup and load control, while Albér UXIME collects, processes and reports data.

### **Utility Market Battery Monitoring Solution**

# UXIME Load Control Alber™ Utility Products MLC (This project) Load Controller UXIME One per string Controller Controller

## Albér™ Battery Capacity Testing Interface (BCTI)



### **Battery Configurations Supported**

Supports 8 different configuration, including up to 62 cells and 12V and 6V VRLA Modules.

Technology	Nominal Volts	Battery/String Configuration (Number Of Strings) X (Number Of Data Points) X (Nominal Voltage Of Data Point)
2V cells, VLA/VRLA	48V	1X24X2V
2V cells, VLA/VRLA	116V	1X58X2V
2V cells, VLA/VRLA	118V	1X59X2V
2V cells, VLA/VRLA	120V	1X60X2V
2V cells, VLA/VRLA	122V	1X61X2V
2V cells, VLA/VRLA	124V	1X62X2V
12V modules, VRLA	120V	1X10X12V
6V module, VLA or VRLA	120V	1X20X6V

### **Overview**

Albér™ BCTI and Albér™ UXIME provide a fully automated solution that now offers both internal resistance and capacity battery testing for utility and industrial applications. Standard configurations are specifically designed for utility substations' 120V and 480V applications. As such, the device can be used to meet NERC PRC-005-6 requirements and IEEE 450 recommended practices for battery maintenance and monitoring.

### **Business Continuity**

- User programmable tests
- DC capacity and resistance testing
- Onsite, anytime testing

### **Operational Management**

- Integrates to building management systems
- Embedded Web server with priority email scheduler
- 24x7 data collection, analysis and remote alarm notifications
- Compact footprint saves space for other equipment

### **Real-Time Data Capture**

- New! Battery capacity data
- Overall string voltage
- Individual string
- Individual cell voltages
- Cell/block temperatures (Optional ELS2)
- Ambient temperature
- Discharge current
- Float current AC ripple current
- Data storage
- Electrolyte Level (Optional)
- ± Charge cable resistance
- Ground fault currents