

Trust Your Batteries[™]

Full Line Brochure

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Technology that lets you Trust Your Batteries

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www.alber.com



Trust Your Batteries

Your battery is the heart of your backup system. And just like your own heart, you don't want it to fail.

The Solution

For more than thirty years, Albér has dedicated its worldwide operations to raising the bar in battery testing and monitoring. It's what we do and we take our mission very seriously. Today, Albér is the trusted name in many business sectors that depend on power backup systems with mission critical battery applications, including:

- · Major data centers
- Global financial networks
- Industrial manufacturing facilities

- Telecommunications providers
- Critical aviation communication centers
- Nuclear power plants
- Hospitals and other organizations with vital power backup requirements

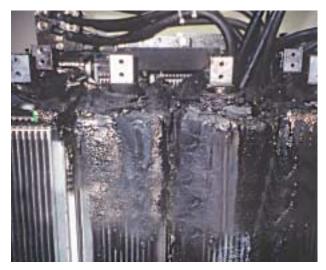
Albér is about integrity, reliability, and product innovation. It is our proven technology that makes the difference between unexpected failure and continued success!

Healthy batteries make for a healthier bottom line

Mission critical technology fuels the global economy 24/7, 365 days a year. Downtime, even a few critical minutes, can cost you millions of dollars.

As a precaution, many large enterprises invest heavily in backup power systems with highly sophisticated electronics and generators. The reality, however, is that these high priced systems are completely dependent upon full-functioning batteries. If these batteries fail before the generator kicks in, power will be lost and valuable raw material and production time will be wasted. Critical data can be erased, not to mention the costly aftereffects of downtime in business communications.

The moment you realize that your batteries are the main cause for costly downtime, and that there is a solution for this problem, you will have made a huge step towards protecting your enterprise bottom line.



Not all testing methods are created equal

In advanced medicine, most heart problems are detected early, in large part because the medical industry has advanced beyond the basic test of using a stethoscope. Unfortunately, AC test systems can be compared to a stethoscope because they are unable to assess the true health and longevity of a battery. Albér's Internal DC Resistance test method eliminates the uncertainty of outdated test methods. Much like a battery ultrasound, our proven method enables the user to "look inside" and assess the battery's true condition. This is the very reason our customers trust Albér to detect potential battery problems before they become a major financial problem.

BATTCON ... Helping Companies Stay Energized

Since 1997, we've made a major commitment to the stationary battery industry as hosts of the international BATTCON Conference. This annual, three day symposium features seminars, exhibits and speaker presentations from users and manufacturers of batteries and related products, enabling attendees to better understand the critical needs of users. BATTCON is a non-commercial conference dedicated to advancing the battery industry.

Continuing Education

We believe a professionally trained technical staff is essential to battery backup system reliability. Therefore, Albér is pleased to offer a monthly Battery Basics Seminar presented in different cities across the USA.

We also offer in-house battery testing practice and product training tailored to a customer's unique application requirements.

Condition Assessment Equipment

Albér delivers "smart technology" equipment that can effectively assess your battery's condition. Our portable CELLCORDER is well known for its reliability and durable construction. It is designed to be used without taking the battery offline. A major benefit!

Use continuous monitoring to your advantage. Albér's BDS and MPM systems provide a cost effective solution capable of ongoing monitoring for even the most complicated battery system.

Capacity Assessment Equipment

The Albér BCT-2000 utilizes load banks that perform constant current-capacity testing. This front line defense enables you to safely and reliably test a battery's total capacity. Single-test charge units and recharging modules are also a part of Albér's arsenal of battery protection equipment. Most of the capacity assessment tests are performed with the battery off-line.

Albér Leads the Way ...

As the only manufacturer offering comprehensive solutions for ALL accepted battery maintenance procedures, Albér continues to set the standard in battery testing and monitoring technology. Our broad range of products provides you every possible solution your business could ever need. Now that's peace of mind. And, that's Albér!

Battery Monitors, Test Equipment and Educational Services

CONDITION ASSESSMENT	CAPACITY ASSESSMENT	EDUCATION
ON-LINE		PUBLIC
Manual Cellcorder Automatic/Continuous Monitor System BDS, MPM and BPM-100	Single Cell Tester SCT-600/1200	Battery Basic Seminar
	Digital Hydrometer DMA-35n	
	Test Tools RM-650 and PSC-10	Battcon Conference
MLT-12	BCT-2000 Battery Cell Scanner	Battery Basic Seminar
	Dattery cen ocanner	
Momentary Load Tester	CLU Continuous Load Units	Product Training
OFF-LINE		IN-HOUSE



Trust Your Batteries

Portable Equipment

Cellcorder® CRT-400 Cell Resistance Tester

The Cellcorder CRT-400 Cell Resistance Tester was specially designed to strictly comply with IEEE standards for testing batteries.

When a battery is tested, the measurement will be affected by several factors.

- Online tests are subject to ripple (AC noise) from the charger or inverters
- Batteries have a natural capacitance that will influence the accuracy of the readings
- The size of the test current directly relates to the accuracy of the measurement

With Alber's patented technology, the Cellcorder's DC resistance test is not influenced by these factors. The Cellcorder continues to outperform the competitive AC testing instruments by producing repeatable results in all environments.

This well-proven and patented DC resistance test completely eliminates the guesswork when trying to find the weakest link.





SCT-600/1200 Single Cell Test and Charge System

Designed for 2V cells, the SCT is the perfect complement to the Cellcorder. After the Cellcorder identifies a potentially bad cell, the SCT assesses absolute battery capacity using a load test compliant with IEEE. The instrument can be used with the cell on-line. The SCT includes the discharge/charge unit, load cables, and Windows software. An optional laptop is available.

Advantages and Features

- Performs a programmable, constant current, constant power or profile discharge test
- Automatically recharges the cell after the test
- Stores all test data for future report generation
- USB interface



DMA-35n Digital Storage Battery Hydrometer

The DMA-35n is a handheld, stand-alone digital density meter suitable for use in demanding industrial environments. Simply press a lever and, within seconds, the temperature, density, specific gravity or percent concentration of the sample is displayed. To save the data, simply press a button. 1024 data points can be stored in an optional memory module and transferred to the Cellcorder or a PDA via infrared port or a laptop via the serial port.

Advantages and Features

- Weighs only 10 ounces
- Battery powered
- Optional memory module

CAPACITY ASSESSMENT

ON-LINE

ON-LINE

Advantages and Features

- Measures and records the three critical parameters cell voltage and internal battery resistance as well as intercell resistance
- Patented Internal Resistance measurements detect failing cells before they become a problem
- Bluetooth Capable audible voice status during testing and data transfer to your PC
- USB Flash Drive easy data transfer to your PC
- Battery Analysis Software identifies problem cells, creates reports and archives data
- IrDA allows wireless communication with PC and the DMA-35N Hydrometer
- Tests batteries from 0-16V
- Includes new battery test clamps with multiple jaw options
- · Lighted interchangeable spike probes with test status

Permanently Installed Equipment

The Albér, permanently installed battery monitoring system offers state-of-the-art technology that ensures battery system reliability. The monitors measure cell or block voltage, ambient temperature and discharge current 24x7x365. The monitor performs automatic internal resistance tests on regular intervals. This data allows the user to avoid battery failures and optimize useful battery life. The system alarms on conditions outside set thresholds and communicates to users via the Albér Monitor software or via Modbus or SNMP to third party systems or building management systems. Communication is via network card, modem or USB port.

The Albér system utilizes three building blocks. The Controller is the central point in the system and consolidates all data and communicates via selected communication options. The Data Collection Module (DCM) is the measuring device that is directly connected to the batteries. The Resistance Test Module (RTM) is used during the resistance test.



RM-650 Recharge Module

The RM-650 Recharge Module is the first device that lets you safely reconnect a discharged string to the

power bus so the existing on-line charger can be used for the recharge. The RM-650 incorporates a manual or automatic current limiting circuit to facilitate the reconnection of the discharged battery string.

Advantages and Features

- Saves time and money.
- Safe reconnection of a discharged battery string to the power bus
- Easy-to-read indicators for current, voltage, and process status



PSC-10A Programmable Smart Charger

The PSC-10A is a programmable smart charger for use where it is necessary to give a single cell a boost or equalization charge. This charge may be required to bring a single cell up to an average of cells in an active string, or may be used on cells that are considered spare (not installed in an active battery string).

Advantages and Features

- Internal memory to log the voltages at beginning of cycle, at equalization, and at end of cycle
- Data and the test profile are displayed on an LCD graphic display
- AC powered, and fully isolated from the power line by use of an isolation transformer

Battery Mo

ON-LINE



BDS-256 XL



This is the fully modular monitor solution for large UPS battery systems. It can be configured for any battery setup and the distributed technology allows for fast and reliable cell scanning.



Optimized monitor for battery systems based on 12V VRLA batteries. The monitor is designed to be mounted on top of a battery cabinet and is supplied with labeled, custom cables for quick and easy installation.



This is the optimal monitor for smaller DC systems. One MPM-100 can monitor up to four strings of 48VDC or a single string of 130VDC.



Proper load testing is the only way to determine where the battery resides on its expected life curve. The BCT-2000 capacity test system will test any battery in service today. The BCT-2000 performs a capacity test using a programmed constant current or constant power load and an integrity test using a high current momentary load, allowing identification of weak cells and conduction paths. The data acquisition module acquires all cell voltage, overall string voltage, and current readings.

Advantages and Features

- Compatible with the earlier BCT-1000
- Available in 128 cell and 256 cell versions
- Laptop computer data logging unit provides the display and programming parameters for the test

CLU Continuous Load Units

The Continuous Load Unit provides the load during a capacity test. It may be used with the BCT-2000, the BDS monitor or stand alone with the Manual Control Box. The Load Units can be ordered in standard configurations or be tailored to individual customer needs. Configuration and design of the resistive elements enable the user to adjust the load in small increments through the entire test system capacity.

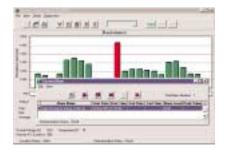
Advantages and Features

- Mounted on lockable, hard rubber casters for portability
- Computerized control secures safe testing
- Standard units are available from 21VDC to 270VDC

nitors, Test Equipment and Educational Services

BMDM Software

The battery management software allows for efficient trending analysis. Set thresholds on all parameters, with color coding that simplifies analysis. A Java based web client and SQL server are also available.



The BMDM software is designed to give the user complete control. Graphs are easy to interpret with color codes indicating weak cells. The built-in setup wizard assists during startup for problem free install.

Advantages and Features

- · Reliable and repeatable measurements unaffected by noise
- · Automatically detects and records discharges
- Display discharges in real time for safe discharge tests
- Communication via USB port, modem or TCP/IP network card
- · Modbus or SNMP protocol for communication to third party systems
- Fiber optic cable for problem free communication between module
- Standard and customizable reports

PUBLIC

Battery Basic Seminar

Albér offers battery seminars and workshops that focus on safeguarding emergency back-up systems through proper battery maintenance and testing. Hands-on sessions cover topics such as: battery fundamentals; battery installation, storage, inspection, and maintenance; charging; safety; monitoring; and load testing.

Seminars are held in different cities throughout the country every month. Please visit our website www.alber.com for a listing of seminars in your area.

Battcon Conference

The three-day symposium is the central event in the yearly power storage equipment calendar. With seminars and exhibits, Battcon offers presentations from users and manufacturers of batteries and related products, enabling industry to understand the needs of its users.

Sessions on manufacturing, maintenance, and testing issues, including presentations of papers, open forum discussions with the authors, and panel discussions with industry specialists, go hand in hand with a great networking opportunity.

The conference is non-commercial and dedicated to advancing the industry.

OFF-LINE



MLT-12 Momentary Battery Load Tester

This compact portable tester provides pass/fail status for 12 volt modules. The MLT-12 features a 20 second automated load test at a 50 amp continuous load and displays pre-test voltage and also displays voltage at the end of the load test.

Advantages and Features

- Robust lightweight unit is ideal for field testing
- Completely rejects AC ripple

IN-HOUSE

Battery Basic Seminar

Albér offers battery seminars and workshops that focus on safeguarding emergency back-up systems through proper battery maintenance and testing. Hands-on sessions cover topics such as: battery fundamentals; battery installation, storage, inspection, and maintenance; charging; safety; monitoring; and load testing. Seminars will give your personnel expertise in battery maintenance, saving you costly down-time and product replacement costs.

Product Training

Classroom and hands-on training for users of new equipment is available at the customer's facility. Classroom training instructs key personnel about the highly specialized field of battery test and maintenance. Hands-on work sessions ensure understanding of equipment operation.

Lectures directly relate to equipment use and typically address topics such as battery test equipment, battery monitoring, and related equipment.

Battery training sessions usually have 10 to 20 students and last 8 to 12 hours, depending on customer requirements. Session content can be adjusted to individual customer needs.



Trust Your Batteries

Battcon International Battery Conference Visit *www.battcon.com* for details.

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