Alber Battery Monitoring System
When the unexpected is unacceptable
We’re Emerson Network Power, backed by Emerson, a global company that brings technology and engineering together to provide innovative solutions for the benefit of our customers. We’re the world leader in providing Business-Critical Continuity™ to organizations like yours, enabled by our product and service centers of expertise.

For more than thirty years, Albér – Emerson Network Power, 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.

For Battery Monitoring Systems we provide the reliability of our measuring patented technics, the flexibility of our equipment system, the savings related to the optimized useful battery life.
Reliability

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

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.

Albér monitors your batteries and prevents premature battery failures. Albér’s Internal DC Resistance test method eliminates the uncertainty of outdated test methods.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 assesses 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.

Application Areas

• 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
Advantages and Features

• Reliable and repeatable measurements unaffected by noise.
• Automatically detects and record discharges.
• Display discharges in real time for safe discharge tests.
• Communication via serial 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 modules.
• Standard and customizable reports.

Flexibility
On-Line Permanently Installed Equipment

The Albér 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 allow the user to avoid battery failures and optimize useful battery life. The system alarm on conditions outside set thresholds and communicate 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 serial port.
BDS-256
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.

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 option. The Data Collection Module (DCM) is the measuring device that is directly connected to the batteries. The External Load Module (ELM) is used during the resistance test.

BDS-40
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 custom cables, with leads cut to length and labeled for quick and easy installation.

MPM-100
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.

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 is 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.
The total cost of the ownership is reduced by the optimized useful lifetime of the batteries, the helped maintenance, the avoided premature failure of the battery, the increased safety.

If one cell fails open, that cell will bring down the complete string.

Detect weak cells before they cause a failure.

On-Line Portable Equipment

The Cellcorder CRT-300 Cell Resistance Tester was specially designed to strictly comply with IEEE standards for testing batteries online.

When a battery is tested online, the test is subjected to ripple from the charger, which makes ohmic measurement tests complicated. The well-proven Alber DC resistance test method completely eliminates these distorting factors. The Cellcorder outstrips competitive testing instruments by producing very high repeatability in testing.

The Cellcorder comes with easy keyboard entry, hard shell carrying case, AC charger, data trending and analysis software and a user-friendly manual. An optional IR printer is available.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>W 178 mm x D 76 mm x H 305 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>1.5 Kg</td>
</tr>
</tbody>
</table>
Technical Data

**BDS-256 System**

**Parameters per One Controller**

- **N° of cell channels:** Up to eight strings of 256 cells per string. Up to 6 DCM units per string.
- **Packaging Controller:** 19” rack-mount, W 482,6mm x D 207mm x H 133,4mm / W 19” x D 8,5” x H 5,25”
- **Packaging DCM:** 19” rack-mount, W 482,6mm x D 308mm x H 44,5mm / W 19” x D 12,125” x H 1,75”
- **Packaging ELM:** 19” rack-mount, W 482,6mm x D 308,8mm x H 133,4mm / W 19” x D 12,156” x H 5,25”

Optional brackets available for mounting in 23” rack.

**Note:** (1)- Data Collection Module  (2)- External Load Module

---

**BDS-40**

**Parameters per one BDS-40 Base Unit**

- **N° of cell channels:** Up to one string of 40 cells and five Plus Unit for five additional strings of 40 cells each, 12V cell. Max 480Vdc.
- **Packaging Base Unit:** W 482,6mm x D 411,5mm x H 198,1mm
  - W 19” x D 16,2” x H 7,8”
- **Packaging Plus Unit:** W 482,6mm x D 411,5mm x H 155mm
  - W 19” x D 16,2” x H 6,1”

---

**MPM-100**

**Parameters**

- **N° of cell channels:** Up to four strings of 2, 4, 6, 8V cells, up to one string 12V cells. Max 130Vdc.
- **Packaging:** 19” or 23” rack-mount,
  - W 482,6mm or 584,2mm x D 257,3 mm x H 44,45mm
  - W 19” or 23” x D 10,13 “ x H 1,75”
  - Wall-mount with optional mounting brackets

---

While every precaution has been taken to ensure accuracy and completeness in this brochure, Emerson Network Power assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

© 2006 Emerson Network Power. All rights reserved throughout the world. Specifications subject to change without notice. All names referred to are trademarks or registered trademarks of their respective owners.
Emerson Network Power, a business of Emerson (NYSE:EMR), is the global leader in enabling Business-Critical Continuity™. The company is the trusted source for custom, adaptive and ultra-reliable solutions that enable and protect its customers’ business-critical technology infrastructures. Backed by the largest global services organization in the industry, Emerson Network Power offers a full range of innovative power, precision cooling, connectivity and embedded products and services for computer, communications, healthcare and industrial systems. Key product brands within the Emerson Network Power family include Liebert, Knuerr, ASCO, Astec, Lorain.

Emerson Network Power.
The global leader in enabling business-critical continuity.

www.eu.emersonnetworkpower.com
marketing.emea@emersonnetworkpower.com

- AC Power Systems
- Embedded Power
- Connectivity
- Integrated Cabinet Solutions
- DC Power Systems
- Outside Plant
- Power Switch & Control
- Precision Cooling
- Services
- Site Monitoring
- Surge & Signal Protection