

### *Alber delivers the solutions you need...*

A real time battery monitor designed for Utility Bulk Power Systems and NERC compliance...to save you time and money!

- Automate the IEEE Recommended Practices for battery maintenance and testing
- Maintain complete and accurate maintenance records
- Multiple remote communications and alarm options

### Real Time Data Capture

- Overall String Voltage
  - Individual Cell Voltages
  - Ambient Temperature
  - Cell/Block Temperatures
  - Discharge Current
  - Float Current
  - AC Ripple Current
  - Data Storage
- Vital battery parameters are continuously compared to user programmable alarm thresholds
  - View key battery parameters during a scheduled capacity test or during any power outage

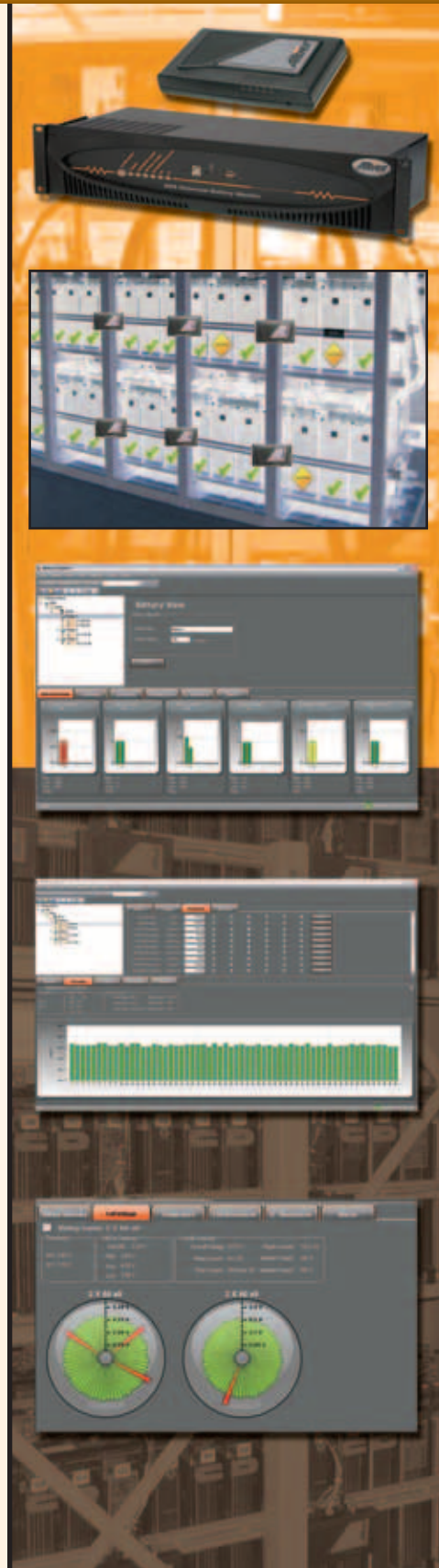
### Proactive Continuity and Integrity Testing

- User programmable DC resistance tests
- Internal cell resistance test (Battery State of Health)
- Intercell and Intertier connection resistance test

### Stand Alone System

- No onsite computer is required for data collection and storage
- Easily integrates to building management systems
- 7x24 data collection, analysis, and remote alarm notification

*Alber is about integrity, reliability and product innovation.  
It is our experience and proven technology that make the  
difference between unexpected failure and continued success!*





### BDS Universal Xplorer System Specifications

This section describes specifications for the BDSU system components.

#### Agency Approvals

- UL listed. File number E212234

#### Operating Environment

- Temperature Range: 5°C to 40°C (41°F to 104°F)
- Humidity Range:
  - 0% to 80% RH (non-condensing) at 5°C to 31°C
  - 0% to 50% RH (non-condensing) at 32°C to 40°C
- Indoor use only
- Installation Category I:
  - DC Controller (UXCM)
  - System Module (UXSM)
  - Battery Module (UXBM)
- Installation Category II:
  - AC Controller (UXCM), only
- Pollution Degree 2
- Altitude: 0 to 2000 meters above sea level



### Controller Module (UXCM) Specifications with Embedded System Module

This section describes specifications that apply to the Controller (UXCM).

#### Alarms

- One hardware failure contact
- Two Form C:
  - Assignable as Maintenance or Critical
  - Programmable for latching or non-latching

#### Input Power

- AC Powered Option: 90 to 264VAC, 47 to 63Hz
- DC Powered Option: 19 to 140VDC
  - 45 W (maximum)
- Optional Internal Battery Backup
  - 3.7V, 8.8Ah lithium battery pack, with a run time of 30 to 40 minutes (configuration dependent)

#### Communication

Physical Connection      Protocols Supported

- |            |                     |
|------------|---------------------|
| • Ethernet | • Velocity          |
| • RS-485   | • Modbus            |
| • USB      | • SNMP              |
|            | • Http (web server) |

#### Communication with System Module (UXSM) and Battery Module (UXBM)

- 1mm plastic optical fiber
- Maximum rate/distance between nodes is 56Kbps at 250 feet or 76 meters.

#### Packaging

- 2 U chassis
- Dimensions: 17.13"L x 3.29"H x 7.15"W
- Weight: 3 lbs.
- Cabinet top/19" rack mounting brackets

### System Module Specifications

Parameter	Tolerance	Number of Inputs
String Voltage	0 to 80.00 volts: 0.2% of reading ±0.1 volts 0 to 400.0 volts: 0.2% of reading ±0.2 volts 0 to 600.0 volts: 0.2% of reading ±0.4 volts	
*Discharge Current	0 to 4000A DC, ±1% of full scale	1
*Ripple Current	0 to 250A RMS, ±5% of full scale	1
*Float Current	0 to 5000mA DC, ±1% of full scale	1
*Ambient Temperature +Requires optional sensor or transducer	0°C to 80°C ±1°C (32°F to 176°F)	2
*Transducer accuracy affects overall current / temperature reading accuracy.		

#### Rear Panel Outputs

- +15VDC, -15VDC power output for string/ripple current transducer
- +24VDC power output for float current sensor

#### Packaging

- ABS plastic housing
- Dimensions: 8.77"L x 4.80"H x 1.68"W
- Weight: 5 oz. or 8 oz. with battery option

### Battery Module (UXBM) Specifications

Parameter	Tolerance
Cell Voltage	2V range    0 to 4V    0.1% ±2mV 4V range    0 to 6V    0.1% ±4mV 6V range    0 to 9V    0.1% ±6mV 8V range    0 to 12V    0.1% ±8mV 12V range    0 to 18V    0.1% ±12mV 16V range    0 to 24V    0.1% ±16mV
Internal Cell Resistance	0 to 32,000µΩ, 5% of reading ±2µΩ
Intercell Resistance	0 to 5000 µΩ, 5% of reading ±5µΩ. Optional harness required.
Intertier Resistance	0 to 5000 µΩ, 5% of reading ±5µΩ
Cell / Monobloc Temperature	0°C to 80°C ±1°C (32°F to 176°F)
Power	7 to 97V, 2W or less over the entire operating range.

#### Packaging

- ABS plastic housing
- Dimensions: 8.77"L x 4.80"H x 1.68"W
- Weight: 5 oz.

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