

MODEL BVS-S3 BATTERY VALIDATION SYSTEM



The BTECH Model BVS-S3 Battery Validation System is the BTECH Flagship installed base battery monitor for rack, or stack-mounted battery systems. The BVS-S3 offers a completely automatic approach for on-line battery monitoring and proactive data acquisition to identify potential battery problems.

Designed for Rack and Cabinet Mounted Batteries

The BVS-S3 Battery Validation System is designed as a wall-mount battery monitoring system, and it can be used for both rack and cabinet mounted battery strings.

The powerful S3 can be ordered with up to 257 connections in increments of 16 and a maximum of 7 parallel strings. Battery types monitored can be either lead-acid or nickel-cadmium; flooded or VRLA; 1 to 12 VDC cell/units. It measures internal cell impedance and connection resistance, battery voltage, ambient and pilot cell temperatures. The monitor also and logs battery discharge current.

The BVS features automatic test and data acquisition with user programmed test intervals. Also included are local and remote alarm features for out-of-limit conditions of cell voltage and impedance, system voltage and temperature, loss of AC power and battery discharge. The BVS Observer, with the auto-polling capability, and the BVM (Battery Validation Manager) Software captures, archives and reports the measured data. Data reports can be viewed, graphed, printed and auto-analyzed. This data will provide information about the internal health of the battery.

The BVM Software Version 3.x is designed to run on Windows® based systems from 9.x, ME, NT4, 2000 and XP.

SYSTEM FEATURES:

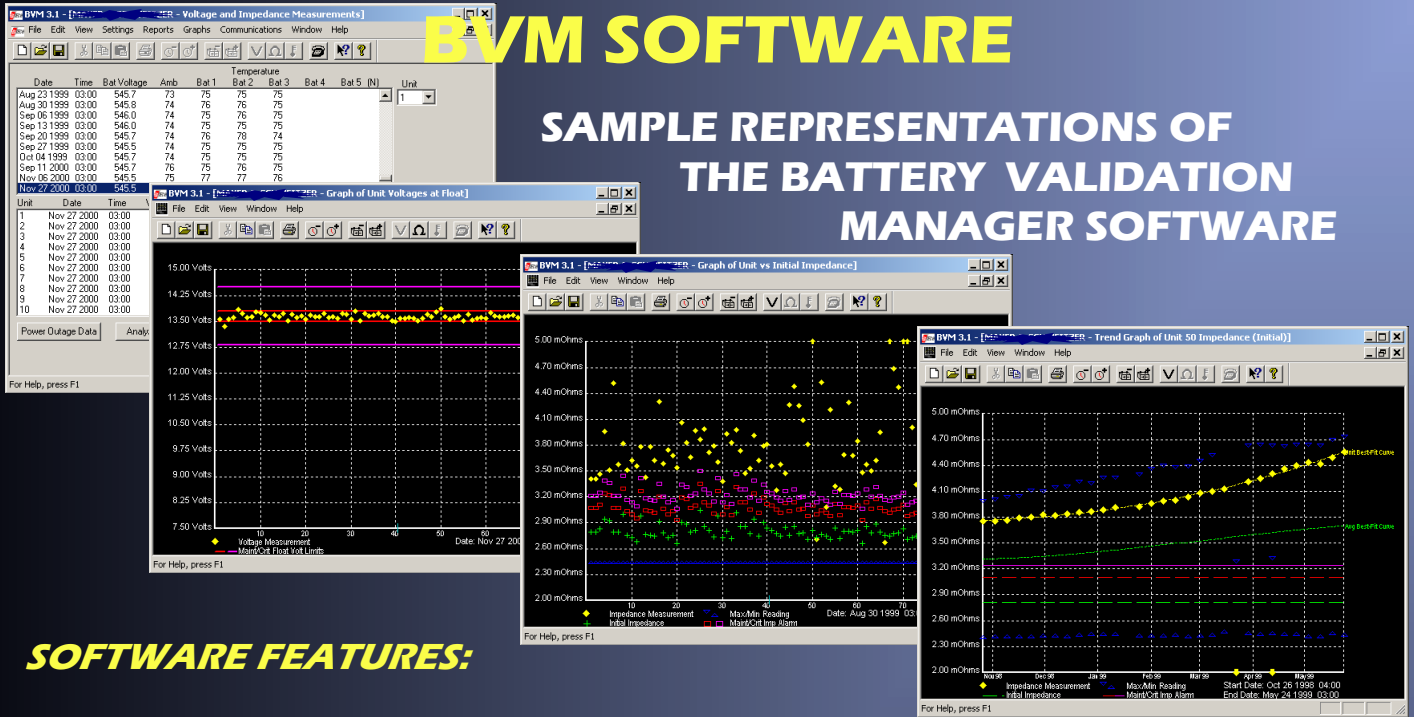
- Individual Internal Cell/jar Impedance Monitoring.
- Connection Resistance Measurement.
- Ambient and up to 3 Pilot Cell Temperature Monitoring.
- Battery Discharge Data Logging.
- Automatic Remote & Local Data Acquisition.
- Operator Programmable Test Intervals and Test Measurement Parameters.
- Out-of-limits Alarms for:

*Unit Impedance & Voltage
System Voltage
Temperature
Power Outage*

- Internal Battery Backup for Maintaining Monitor Operation During Power Outages.
- Battery Voltage, Current and Cell Voltage Performance During a Discharge.
- Choice of Communication Options.
- An Interactive Battery View that shows an actual battery layout pin-pointing battery health at a glance by utilizing a green, yellow and red color code and the exact location within a battery string.

BVM SOFTWARE

SAMPLE REPRESENTATIONS OF THE BATTERY VALIDATION MANAGER SOFTWARE



SOFTWARE FEATURES:

- Captures, archives, reports and graphically displays data by location, date and unit (cell/jar) number.
- Displays voltage and impedance trends.
- Automatically polls multiple BVS monitors.
- Automatically receives, displays and resets alarms.
- Alarms can be generated on set-point or predictive slope.
- All measured parameters are automatically analyzed.
- Displays discharge events and relative data such as voltage, current and KW performance.
- All BVS settings can be controlled and changes either remotely or locally.
- Provides password protection for changing any setup parameters.
- Provides the ability to import a battery bitmap for observing battery alarm status at a glance.
- On-line help screens will guide the user through the operation of the system and software.

SPECIFICATIONS:

- Maximum 256 cells and 1 to 7 Paralleled Strings
- Maximum String Voltage 600VDC
- Impedance Test Current: 10 Amps RMS (Patented)
- Operating Temperature: 32°F to 130°F (0°C to 55°C)
- AC Power Requirements: 100/240VAC, 50/60 Hz , 0.6A
- Communication Options:
 - Telephone Modem
 - Short-haul Modem
 - Ethernet
- Voltage Sense Lead Fusing: 1/16 Amp
- Impedance Load Lead Fusing: 9 Amp
- Battery Drain During Impedance Test is 0.1 mAh per cell
- Measurement Resolution:
 - Battery Voltage: 0-600VDC +/- 100Mv
 - Cell Voltage: 0-16VDC +/- 10Mv
 - Impedance: 100μΩ-10mΩ +/- 0.01mΩ
 - Temperature: 32°F to 130°F +/- 1°F
- Programmable Intervals: 1-99 Days between test cycles
1-30 Min during power outage

BTECH SERVICES:

BTECH offers a complete system installation and start-up. BTECH also offers a Site Monitoring Center that provides the customer with weekly and 24x7 surveillance service on their battery sites.



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