





UPS 2 Volt Systems

BTECH's S5 Battery Monitoring and Validation Systems are designed specifically for 2 volt cells. The S5 system is designed to collect reliable data on even the largest Amp hour cells. The S5 can be installed on VLA rack, VRLA stack and VRLA rack applications without interfering with normal battery maintenance activities and without obstructing access to the cells. BTECH's impedance measurement technology is considered the reference method for stationary monitoring system ohmic testing. BTECH's S5 system has the sensitivity and high-end filtering required to finding failing cells in any application and UPS/charger type. BTECH's patented rate of change analysis finds bad units well before they pose a risk to your critical systems. BTECH's S5 system uses fewer wires than any of our competitors. The wire set is pre-designed, pre-terminated and tested; cutting installation time in half while increasing system reliability.

Key System Features

- BTECH Monitors Key Battery Parameters: Cell and Interconnect Impedance, System Voltage, Float, Charge and Discharge Current, plus Ambient and Pilot Cell Temperatures
- Impedance Measurement Specification of 0.1 +/-0.01 m Ω the real world sensitivity required for flooded cells
- Programmable Test & Out-of-Limits Alarms
- Battery Discharge Data Logging
- Up to 480 Individual Cells and 2 Strings per system
- Individual String Current Monitoring for multi-string systems
- Complete Isolation from the battery String
- Links to BTECH's legendary BVM 4 software suite for reporting and trend analysis

Facility Management System Integration

- Integral Dial Up 56k Modem
- Integral Ethernet Card (Cat 5/6)
- · Local: RS-232 and USB
- Alarms: Text Message to multiple cell phones, pager or e-mail addresses, through BVM Software or BMS integration

Alarm and Data Acquisition Ports:

- Integral Dial Up 56k Modem
- Integral Ethernet Card (Cat 5/6)
- · Local: RS-232 and USB
- Alarms: Text message to multiple cell phones, pagers or e-mail addresses, through BVM Software or BMS integration

Safety

BTECH's Quick-Disconnect Safety Fuses simplify battery replacements while protecting personnel during installation and maintenance.

Why BTECH Is The World Leader In Battery Monitoring

WE'RE SUPERIOR

With over 7,000 systems installed worldwide, BTECH's patented impedance method provides rock solid data accuracy and stability, allowing more time to respond – no other system comes close.

WE'RE NON-DESTRUCTIVE

With a load signal optimized to the battery type, our system never subjects your batteries to a stressful load test. Plus, our system is not powered by your batteries avoiding unnecessary parasitic battery loads.

WE KNOW YOUR BATTERIES

BTECH doesn't just manufacture battery monitoring systems, BTECH's core competencies include DC plant experts, DC plant maintenance and UPS/charger design requirements. These core skills not only enable BTECH to provide the industry leading consulting services our customers expect but also provide unbiased support on the best practices in battery maintenance, battery testing and battery monitoring.























BATTERY MONITORING SYSTEM UPS 2 VOLT VLA AND VRLA APPLICATIONS

Measurement Capability:

Total Voltage: 0-600VUnit Voltage: 1-8 VDC

- Unit Impedance: $100\mu\Omega$ to $30m\Omega$

Temperature:

Unit and Ambient: -32°F to 160°F
Differential: 15°F from default ambient

Discharge Events:

- Date & Time
- System Voltage
- Load Current
- Power Removed
- Unit Voltage Decay

Discharging Logging:

- Programmable

Connection Capacity:

- Total Number of Strings: 2
- Total Number of Units: 480

System Specifications

Measurement Accuracy & Repeatability:

- System Voltage: +/-0.1% Full Scale
- Unit Voltage: +/-0.1% of Reading
- Unit Impedance: \pm -0.01m Ω
- Temperature: +/-1.0°F

Power Requirements

 110 – 250 VAC 50/60 Hz (UPS Protected Power)

Enclosure:

- SCM 600 Controller: NEMA 1 Metal Rack or Wall-Mount
- Voltage/Temperature/Current Flame Retardant Poly
- 1 Current Transducer per string 1% sensitivity

LED Indicators - VM24i DCM:

- Green = Power On

LED Indicators – SCM 600 Controller:

- Green = Summary No Alarms
- Yellow = Summary Maintenance Alarms
- Red = Summary Critical Alarms
- Red Equipment = Hardware Failure
- Alternating Green = Performing Measurement

Software:

- BVM 4.x Windows® based software package
- BVM Observer 4.x designed for Windows® 7 or above

System Configuration

S5H	1	02	240	С	0	WM	00
type	strings	point voltage	monitoring points	measurement	options	configuration	custom code
S5L (60-600V)	1-2 1	2 02	2-480 240	clamp, per string: C		Rack Mounted, RM	
		1.2 01		clamp, per system:		Wall Mounted, WM	
		4 04				Shelf Mounted, WM	
		6 06					
		8 08					
		12 12					
		16 16					

Testimonials

"Eleven years ago, we installed our first BTECH Battery Monitoring System, which promptly found a battery string that would fail open. Since then, we've installed over 30 BTECH systems nationwide for our critical UPS installations. The BTECH systems have proven to greatly reduce battery maintenance costs, extend the life of the batteries and virtually eliminate battery failure by being able to predict precisely which cells need to be replaced in advance.

Based on our experience, I highly recommend BTECH Battery Monitoring Systems"

- Samy Alim - Manager of Engineering - ADP







