

BMS-icom Battery Monitoring System

Model # BMS-icom

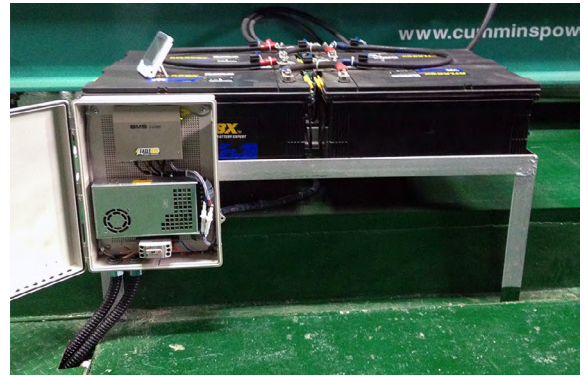


BMS-icom

Product Description

The **BMS-icom Battery Monitoring System** is designed to measure the aging status of up to (4) 12V jars by measuring and recording: string voltage, DC current, jar/cell voltage, internal resistance (I.R.), connection resistance, and temperature. The included **Centroid Snet Battery Management Software** displays and records measured data for comprehensive trending analysis. The BMS-icom is the most accurate, user-friendly, and cost effective solution for monitoring 48VDC systems using (4) 12V batteries.

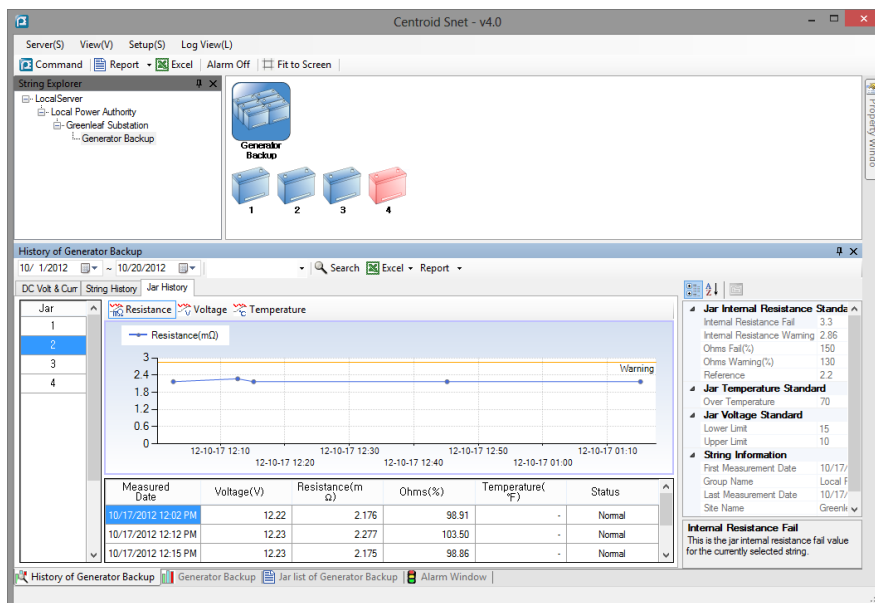
Reduce maintenance costs, improve up-time and manage your battery assets effectively by using the BMS-icom battery monitoring solution for your 48V system. Real-time battery monitoring also reduces maintenance and replacement costs by maximizing your battery life.



BMS-icom Installation

Product Advantages

- 24/7/365 Battery Monitoring
- Installation and maintenance can be done while battery systems are online
- Meets IEEE and NERC standard recommendations for battery monitoring
- Utilizes a patented ripple-removing algorithm
- Injects minimal current for measurement
- Simple to install with custom, pre-assembled materials
- Designed for 48V systems (12V cells)
- Alerts in real-time during outbreak



Centroid Snet Battery Management Software

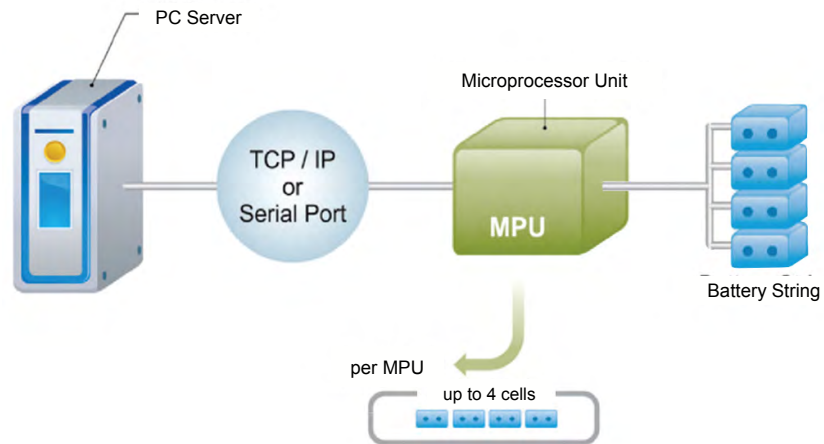
Battery Management Software

- Displays and records string voltage, string DC current, cell voltage, cell I.R., & cell temperature for all battery systems
- Trending analysis of measured parameters on a string or jar/cell level
- Report generation & ability to export measured data to Excel
- Send commands to iPQMS systems
- Detailed log of alarm outbreaks with Email/SMS alerts
- Automatically record, save, & playback discharge & recharge events

System Composition

Components of BMS-icom system between the server and battery system.

- Server and MPU communicate via TCP/IP
- BMS-icom MPU connects up to (4) cells
- Connection fasted to inter-cell-connection (cable or bus-bar)
- MPU gathers battery data through voltage & current sensing cables connected between each cell
- System current measured via current clamp



BMS-icom System Composition

Technical Specifications	
Battery Types:	VLA, VRLA, NiCad, & Others
Measurement Range:	Battery Capacity: 5 – 6,000 Ah Jar/Cell Voltage: 12 VDC DC Voltage/Current: ~ 999.9 VDC/~999.9 A
Accuracy:	DC Voltage / Current: $\pm 0.5\%$ / $\pm 1\%$ Temperature: $\pm 2\%$ Internal Resistance: $\pm 2\%$ Cell Voltage: $\pm 1\%$
Resolution:	AC Voltage / Current: 0.1 V / 0.1 A DC Voltage / Current: 0.1 V / 0.1 A Cell Voltage: 10 mV Internal Resistance: 0.001 Ω Temperature: 0.5 $^{\circ}\text{C}$ (0.5 $^{\circ}\text{F}$)
Test Speed / Test Load:	3 – 4 seconds per cell / less than 2 A per cell
Measuring Interval:	Adjustable from 5 min to 24 hours (voltage & resistance)
Data Transfer:	TCP/IP, RS-232
Operating Environment:	Temperature: 0 – 65 $^{\circ}\text{C}$ (32 – 150 $^{\circ}\text{F}$) Relative Humidity: Under 80%
Power Requirements:	Input: 38 – 58 VDC (from connected batteries) Consumption: 7 W
Dimensions:	140 x 121 x 44.5 mm (5.5 x 4.8 x 1.8 in)
Weight:	70 g (1.5 lbs)

Common Applications

- Generator backup
- Telecom/Communications
- Power Utilities and Distribution
- CATV Broadcasting

System Includes

- Centroid Snet Battery Management Software
- BMS-icom
- O-Clamps for inter-cell cable connections
- C-Clamps for inter-cell busbar connections
- Cabling for string voltage measurement
- Cabling for cell voltage, cell I.R. and temp. measurement
- CT clamp for DC current measurement
- Power cabling
- **Optional:** Spare parts kit

Ordering Information

No.	Model #	Description
1	BMS-icom	Battery Monitoring Solutions: Up to 4 (12V) Jars/Cells