



## BMS-12V4C

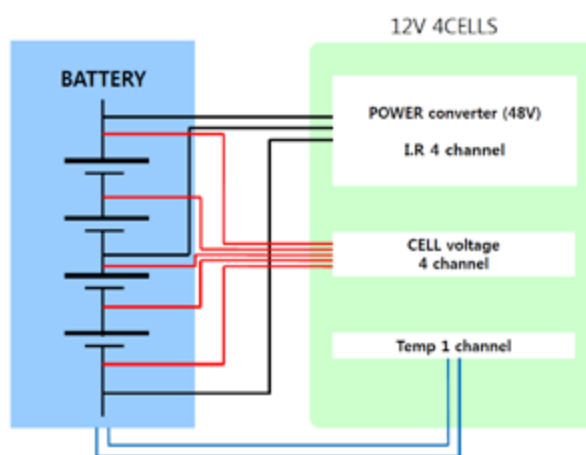
**Common Applications:** Utility, telecom, 48V backup generators



BMS-12V4C Unit

### Product Description

The BMS-12V4C is a low-cost battery monitor for measuring unit voltage, internal resistance, and unit temperature of four (4) 12V batteries. Alarming is available for each measured parameter via dedicated dry contact outputs. It is ideal for monitoring 48V battery backup systems at unmanned locations.



Connection Diagram

### Product Features

- Low-cost, simple battery monitor
- Dry contact alarms for unit voltage, internal resistance, and unit temperature
- Powered by connected batteries
- LED lights for local alarm indication

Technical Specifications	
<b>Measured Parameters</b>	Unit voltage, internal resistance, unit temperature
<b>Measurement Range</b>	Unit voltage: 9 – 16 VDC Internal resistance: 0.1 – 99 mΩ Unit temperature: -20 – 80°C (-4 – 176°F)
<b>Accuracy / Resolution</b>	Unit voltage: ±0.5% / 0.001 V Internal resistance: ±2% / 0.001 mΩ Unit temperature: ±2% / 0.1 °
<b>Data Transfer</b>	RS-232 for configuration software
<b>External Alarming</b>	Dry contact for unit voltage, internal resistance, & unit temperature
<b>Power Requirements</b>	Input: 36 – 75 VDC, Under 2W current consumption
<b>Dimensions</b>	114 x 70 x 39 mm (4.5 x 2.75 x 1.5 in)

### System Includes

- BMS Module
- Installation cabling
- Dry contact connectors
- Battery connection hardware
- USB drive with support literature

### Ordering Information

Model No.	Description
BMS-12V4C	Battery Monitoring Solutions for (4) 12V Units

## BQMS System Composition

Typical BQMS systems are configured with the following main components:

### CCU

The communication control unit processes all measurement data and handles TCP/IP communication and alarming via dry contacts.

### Modules

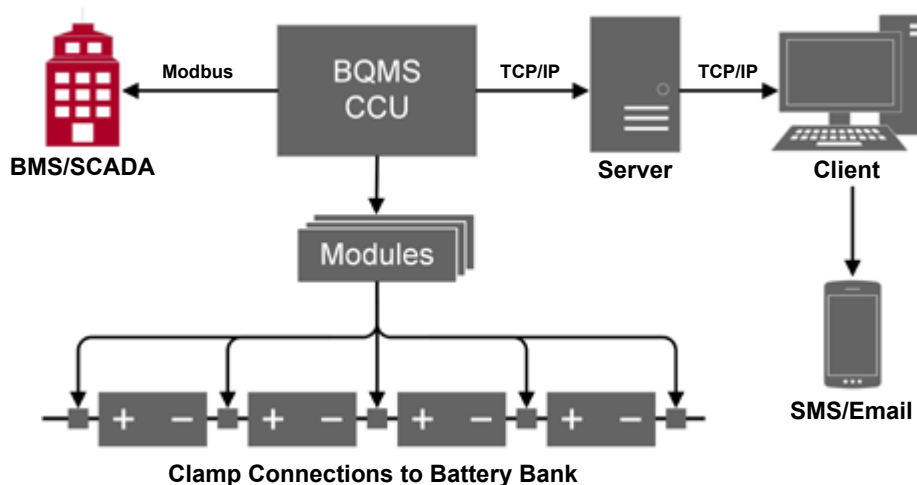
Units connected in daisy chain. Wired directly to the battery connections for measurement of cell/unit parameters.

### Connection Clamps

Physical connection to battery system. Installs to battery inter-cell cables or busbars.

### Server & Client PC

Main computer which interfaces with the CCU and runs Centroid Snet Server application. Client PC's installed on same network for additional users.



Technical Specifications	
Measurement Range	Battery Capacity: 5 – 6,000 Ah System Voltage: 0 – 576 VDC Unit Voltage: 2, 4, 6, 12 Volts Load Current: $\pm 10,000$ A Temperature: 0 – 80°C (32 – 176°F)
Accuracy / Resolution	System Voltage: $\pm 0.5\%$ / 0.1 V Load Current: $\pm 2\%$ / 0.1 A Unit Voltage: $\pm 0.5\%$ / 0.01 V Internal Resistance: $\pm 2\%$ / 0.001 mΩ Unit Temperature: $\pm 2\%$ / 0.01 °
Test Speed / Test Load	30 seconds per bank at less than 2 A per cell
Measuring Interval	Adjustable from every 10 minutes to once per day for unit voltage and internal resistance
Data Transfer	TCP/IP to proprietary software, Modbus
External Alarming	Up to (13) Form C contacts
Operating Environment	Temperature: 0 – 65 °C (32 – 150°F) Relative Humidity: Under 80%
Power Requirements	Input: 43 – 250 VDC / 110 – 220 VAC

### System Includes

- BQMS hardware
- Centroid 2 battery management software
- All installation materials
- Print manual
- USB drive with software and
- Support literature

### Optional Components

- Electrolyte level, ground fault, & hydrogen gas monitoring
- Enclosure
- On-site computer
- Spare parts kit

## Ordering Information

Model No.	Description
BQMS	Battery Monitoring Solutions: Up to 480 Cells/Units