

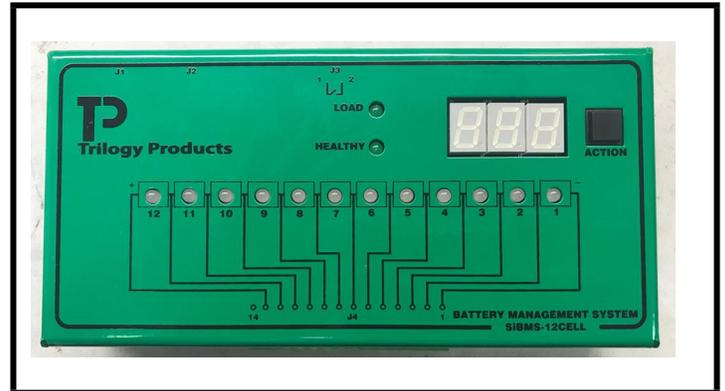
**FEATURES**

- **Manages up to 12 Cells**
- **422 Communications Port**
- **12 Bi-Color LED's for Cell Health**
- **3 Channel Display for Cell Voltage**
- **Relay Contact for Alarm Function**
- **Web-Based Monitoring**
- **Interface to Trilogy Battery Chargers**
- **-30C to +70C Operating Temperature**
- **Meets AREMA Standards**

**DESCRIPTION**

The Trilogy Battery Management System (BMS) is designed to allow the user to monitor a given battery bank (up to 12 cells), either Sealed-Lead Acid or NiCad, as long as the float cell voltage is less than 2.8V. The BMS accepts inputs from a series string of battery cells and passes that information to any Trilogy Battery Charger through a 422 COM Port. Each battery cell is monitored individually and logged via the Trilogy Battery Charger. The BMS will determine whether or not a battery cell is out of range and then activates a relay contact to provide a hard-wired alarm. The corresponding battery charger will (with its Ethernet Port) immediately log the alarm and notify personnel through any smart monitoring system. This eliminates the need for preventative maintenance of batteries such as going to locations and measuring each cell.

The Trilogy Battery Charger and BMS can present their information in real-time through an Ethernet Port and a PC Application provided with both units. The system utilizes an internal data logger to provide information to the user remotely whenever desired. If a technician is in front of the Battery Charger and BMS, they can look at the status of 12 Bi-Color LED's on the front panel of the BMS. Each LED corresponds to a given cell. If the LED is green, the corresponding cell is within an acceptable range and if it is red the cell needs further examination. In addition to the LED's, three 7 segment displays will indicate the actual cell voltage (displayed as 2.25 as an example). The 7 segment display scrolls through all 12 cells pausing for a few seconds between each cell. The Bi-Color LED will flash to denote which cell is being displayed at any given time. A "Freeze" button is provided so the user can lock the display to continuously monitor a particular cell.



At times it is desirable to provide a dummy load for preventative maintenance and testing of the battery. The BMS provides an interface to a dummy load which can be provided by the installer or can be purchased from Trilogy Products (Part # SiBMS-LOAD). This load allows for the battery to be tested remotely. If the battery is fully charged and not under load, it may be desirable to load the battery to determine if the A-Hr rating of the battery is still acceptable. With the BMS system, this can be done remotely or programmed to do at a given interval. The BMS provides an LED that is on when the load is engaged. The built in data logger in the Trilogy Battery Charger will then store the results of the test or provide an alarm if the battery is deemed faulty.

**ELECTRICAL SPECIFICATIONS**

Input Voltage (provided by Trilogy Charger)..... 10-19VDC  
 Maximum Input Power..... 6W  
 COM Link ..... Differential 422  
 Maximum Cells Monitored.....12  
 Maximum Cell Voltage.....2.8V  
 Min Operating Temperature ..... -30°C  
 Max Operating Temperature ..... +70°C  
 Alarm Relay Contact Rating ..... 2A

**MECHANICAL SPECIFICATIONS**

Height..... 4 in  
 Width (exclude's mounting tabs)..... 8 in  
 Depth..... 1 in  
 Weight ..... 4 lbs

**ORDERING INFORMATION**

Item	Catalog Number
Battery Management System	SiBMS-12CELL

