



**GREAT FORWARD**  
Industrial Co., Ltd.

# Battery Strings Monitor and Control Interface Model : BMD-4848

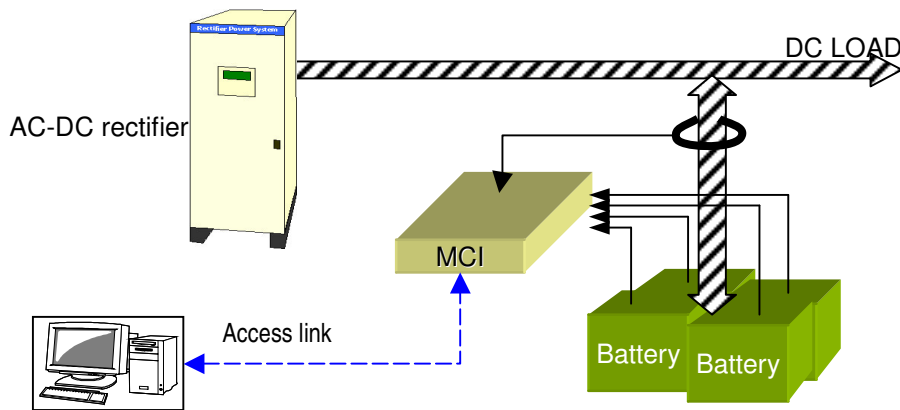


## Profile

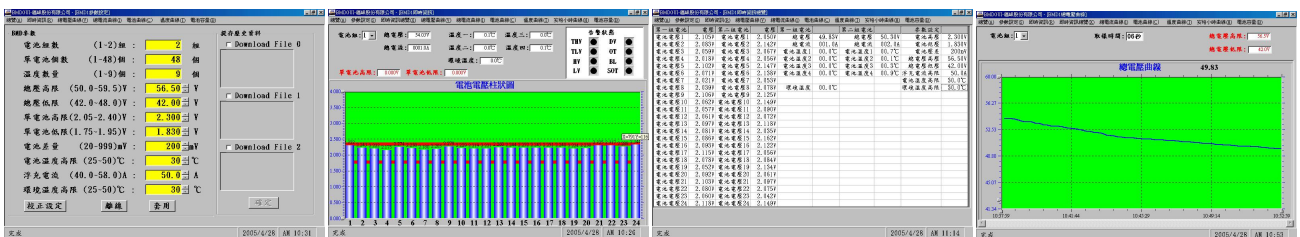
Battery strings Monitor and Control Interface (MCI) are built for daily routine maintenance of battery strings with less man power by providing real-time information from the remote battery sites. Solid state diagnosis circuits can measure multi-loops of battery voltage at the same time. Using GUI to analyze the status of every single cell and reduce the cost for battery maintenance. And due to the on-time treatment, the service life of battery strings are assured.

## Features

- Solid state circuit, providing real-time hi-speed scan of multi-string for battery voltage.
- Monitoring 2 battery strings of their string voltages and currents, 48 single-cell voltages, 8 temperature sensors of battery and 1 of ambient temperature.
- Checking single cell voltage with 2 wires, with short circuit protection to every cell.
- Records of latest 3 events of charge and discharge, including string voltages & currents, single-cell voltage, temperature, battery capacity and Alarm. Up to 240 single records of historical data, making the analysis more accurate.
- Via GUI, real-time data & curve of single cell's characteristic are shown and can be printed out too.



MCI System block diagram



Parameter setting

Real-time status in bar graph

Overview of real-time data

Curve of string voltage

**Specification**

**Monitoring**

Single cell voltage	:0 ~ 4 VDC/Cell
Max. no. of cell	:24 x2 cells
Battery set current	:±999A x2 sets
Battery set voltage	:0~65Vdc x2 sets
Battery temperature	:4 x2 sets
Ambient temperature	:1 set

**Electrical**

- Working voltage: 36 ~ 65VDC
- Display 7 segments display (5Digits), red LED, 0.36"high
- 3 keypads, 1 buzzer
- Temp. measured range: 0 ~ 99°C, Res. 0.1°C, Acc. ±1°C
- Str. voltage measured range: 0 ~ 65VDC, Res. 0.01VDC, Acc. ±0.5%
- Str. current measured range: 0 ~ 999Amp, Res. 0.1Amp, Acc. ±2%
- Single cell measured range: 0 ~ 4VDC, Res. 0.001V, Acc. 5mV
- Communication interface: RS-232D / RS-485
- Protocol: Modbus - RTU mode
- Data transmitting speed: 9,600 ~ 19200bps
- Sampling interval: 6~10sec.

\* Note: Temp.: Temperature; Str.: string  
Res.: Resolution; Acc.: Accuracy

**Alarm**

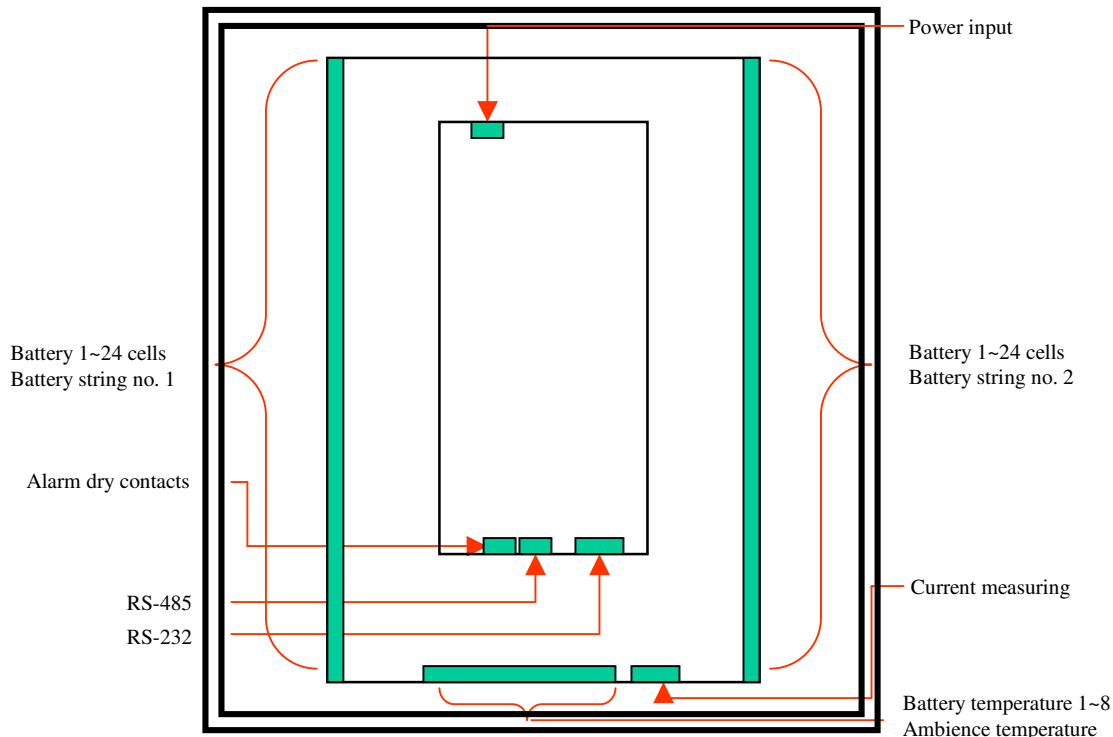
- String voltage Hi voltage
- String voltage Lo voltage
- Single cell Hi voltage
- Single cell Lo voltage
- Battery over temperature
- Ambience over temperature
- Single cell voltage differential
- Battery float charge curent abnormal

**Parameters Setting**

Battery strings	:1~2
No. of cells	:1 ~ 48
Temperature	:1 ~ 9
String voltage Hi voltage	:50.0 ~ 59.5V
String voltage Lo voltage	:42.0 ~ 48.0V
Single cell Hi voltage	:2.05 ~ 2.40V
Single cell Lo voltage	:1.75 ~ 1.95V
Single cell voltage differential	:20 ~ 999mV
Battery Hi temperature	:25 ~ 50°C
Float charge current	:40 ~ 58A
Ambience Hi temperature	:25 ~ 50°C

**Wires connection**

Panel size:W450 x H450 x D150  
Unit:mm



Specification are subject to change without notice..