

# BM-SM

## BTMS String master

add picture

|             |                  |
|-------------|------------------|
| Order code: | <b>BM-SM-xx</b>  |
| Mounting:   | DIN rail, 85 mm  |
| Dimensions: | 85 × 120 × 39 mm |

## Highlights & Features

- Real-time monitoring of string voltage, charge-discharge current, charge-discharge state and string SOC.
- Monitor the voltage, impedance, temperature, SOC and SOH of each battery with BM-CS cell sensors and the specially designed isolated power bus.
- Advanced one-step auto-sensing for individual address. No more manual intervention and setup needed, reducing workload and setup errors.
- Advanced measurement algorithm, no need to discharge large current and measurement can be lossless.
- Balancing function: Keep voltage balanced during the floating charge process of battery pack, keeping the individual battery in the best state, extending backup time and life span of battery pack.
- Communication is based on power-isolated RS485. Secure and stable.
- Quickly locate the alarmed or faulty battery pack in machine room.
- External split-core Hall Sensor, measuring charge-discharge current in different ranges.
- Isolated voltage in communication interface: AC 3750V
- Supports up to 120 batteries (BM-CS)

## Technical specification

|                              |                             |              |
|------------------------------|-----------------------------|--------------|
| <b>Power supply</b>          | Nominal                     | 24 VDC       |
|                              | Range                       | 12 .. 36 VDC |
| <b>Power loss</b>            | ≤ 2W                        |              |
| <b>Operating temperature</b> | Standard                    | 0 .. 45 °C   |
|                              | Limit                       | -10 .. 55 °C |
| <b>Storage temperature</b>   | -40 .. 70 °C                |              |
| <b>Working humidity</b>      | 5 .. 95 %RH, non-condensing |              |
| <b>Dimensions:</b>           | Width                       | 85 mm        |
|                              | Height                      | 105 mm       |
|                              | Height max                  | 120 mm       |
|                              | Depth                       | 39 mm        |

|                      |            |                 |
|----------------------|------------|-----------------|
| Voltage measurements | Range      | 20 .. 800 VDC   |
|                      | Accuracy   | ± 0.5 %         |
|                      | Resolution | 0.01 VDC        |
| Current measurements | Range      | -1000 .. 1000 A |
|                      | Accuracy   | ± 2 %           |
|                      | Resolution | 0.01 ADC        |

LED indicator

|                  |           |
|------------------|-----------|
| Normal operation | Green LED |
| Alarm            | Red LED   |

Wiring

