

# BM-36 Battery Monitoring System (BMS)

For use with NiMH, NiCd and Lead-Acid cells in large strings

## The system consists of the following parts:

### Battery Measurement Module, 1 per cell (BMM)



Connects to 1 cell  
Voltage: 0.5~3.3VDC, Resolution 1 mV, Accuracy  $\pm 0.2\%$   
Resistance: 0~50m $\Omega$ , Resolution 25  $\mu\Omega$ , Accuracy  $\pm 1,5\%$   
Temperature: -20 ~ +85 °C, Accuracy  $\pm 0.5$  °C  
LED Indication: GREEN OK, RED Fault.  
Communication: isolated MODBUS  
Cables: included  
Dimensions: 100 x 70 x 30 mm

### Remote Measurement Module, 1 per 5 cells (RMM)



Connects to 1~5 cells  
Voltage: 0.7~3.3VDC, Resolution 1 mV, Accuracy  $\pm 0.2\%$   
Temperature: -20 ~ +85 °C, Accuracy  $\pm 0.5$  °C  
Communication: Wireless 868MHz/isolated MODBUS  
Internal antenna.  
Cables: optional  
Dimensions: 120 x 120 x 60 mm

### General Measurement Module, 1 per string (GMM)



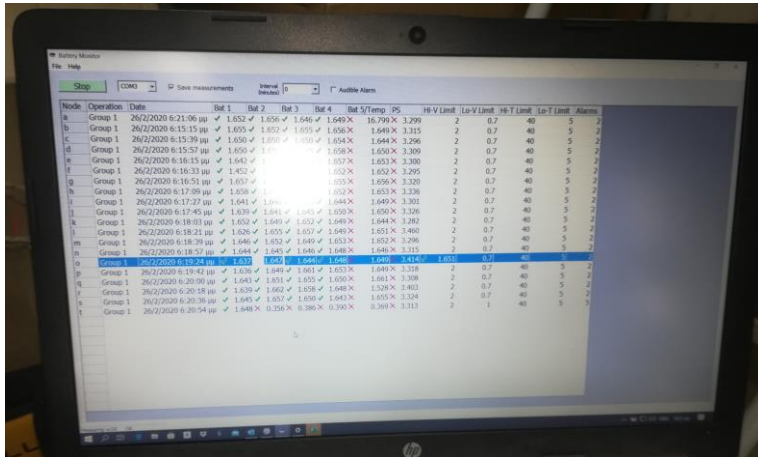
Ambient temperature  
Ambient humidity  
String Voltage 0~300V  
String current 0~400A  
Digital inputs: 4, isolated  
LED Indication: GREEN OK, RED Fault.  
Communication: isolated MODBUS  
Cables: included  
Dimensions: 100 x 70 x 30 mm

### Central unit, 1 per system



Communication with up to 36 BMMs in daisy chain.  
Fanless computer with 21" monitor, keyboard and mouse.  
Windows O.S.  
RDP access.  
MODBUS interface.  
Ethernet interface. Optional: GPRS modem.

## Software included for Windows XP/7/8/10



Real-time display of measurements

Real-time display of alarms.

User configuration with alarm limits.

Measurements storage.

Export to Excel and CSV format.

Email/SMS alarms.

Measurements upload to central server.



Application case with 21 Remote Measurement Modules (85 cells).

Radio communication @ 868MHz between Modules and Central unit.

### ORDERING INFO

Model: BM-36

Part Number: 02.12.0040

**ELEMETRON**

Tel: +30-2121066421

<http://www.eletron.gr>