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# Enerbatt Battery Monitoring System



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## Enerbatt Battery Monitoring System

The Enerbatt series, a superior BMS (Battery Monitoring System), has a complete solution for capturing important parameters of batteries at real time. It is easily to read out voltage and current for each battery block. So, no more nightmares occurred to maintenance engineers about the health checking of batteries. They will know the working conditions of the batteries from desktop or notebook computer in a matter of much quicker, more efficient, more reliable, and lower cost way.

- Modular Design
- Specialized Scanning Units
- High Speed Scanning Technology
- Built in memory stacks
- Optional monitoring software
- Rack mount design

### **Up to 5.000 blocks inside one system**

via one serial communication port. Multi systems up to 255 can be linked with monitoring software Batreviiew or user-developed monitoring program.

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## 4 kinds of Scanning Units

consisting of monitoring of block voltage, string voltage, current, and temperature respectively. All of Scanning Units, which build in 7-10 data channels, employ high speed scanning circuit with the microprocessor to capture the parameters from individual batteries. The unique and high performance program technique inside the microprocessor executes a lot of features to maximize system and minimize external peripheral components.

## High speed scanning technology

refreshing data per second, perfects to monitor batteries especially for the application of extreme high-rate current discharge within a short time. It shall perform well and never lose any impor-

tant data even on some ride-through backup power systems such as UPS and DC Bank for ASD (Adjustable Speed Drive).

## RS485 serial port

communicate with remote computer. The optional Top-Master offers additional ports including RS485/422, RS232, USB, RJ45 (TCP/IP), and dry contacts.

## Recommended computer system

- CPU speed: 1GHz
- RAM: 128MB
- Operating system: Windows 2000/XP
- Other application software:
  - Microsoft Office for making the conventional data report (optional)



## Built-in 3 banks of memory stacks

Whose capacity reaches 1024 lines to store daily report, event log, and running data, and also offer one input dry contact of external trigger and one output dry contact of common alarm.



## Application software, Batreview

that shows up the parameters of batteries connected Scanning Units at real time. This software provides GUI (Graphic User-friendly Interface) application which is developed based on Microsoft Windows Operating System. Engineers or maintenance personnel may easily process and analyze the parameters and history curves of batteries through computer screen. Its colourful graphic diagrams are very simple and clear to help kicking off sleepy and dead batteries.



## Accessory parts

- Standard current sensor 50A, 100A, 300A, 600A & 2000 A
- Temperature probe
- Auxiliary connector of battery terminal
- Top-Master for manifold communication ports
- Internet linking card

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## Technical Specification

### General

Operating Temperature	0°C ~ 40°C
Relative Humidity	≤ 95% without condensing
Enclosure Dimension (1) (WxDxH) mm	483 x 187 x 177
Weight (2)	5 kg
Supply Voltage (3)	100 ~ 240 Vac, 35 ~ 60 Vdc
Power Consumption (4)	70 Watts, maximum
Isolation Voltage	2500 Vrms, 1 min
Communication Port	RS485
Communication Rate	2.400 ~ 57,600 bps

### Block Voltage Measurement Interface

Block Rated Voltage	2 V	6 V	12 V
Specified Measurement Range	0~4 V	4~8 V	9~16 V
Resolution	1 mV		
Accuracy	±10 mV	±20 mV	±50 mV
Input Impedance	≥ 1 MΩ		

### String Voltage Measurement Interface

Maximum Measurement Voltage	520V
Resolution	0,1V
Accuracy	0,3V
Input Impedance	≥ 1MΩ

### Current Measurement Interface

Maximum Measurement Range	3,000A
Resolution	0,1A
Accuracy	±3%

### Temperature Measurement Interface

Maximum Measurement Range	0° ~ 100°C
Resolution	0,10C
Accuracy	±10°C

- (1) The rack-mounted enclosure can be installed with 8 scanning units plus 1 power supply board
- (2) The weight shown includes 8 scanning units and 1 power supply board
- (3) Standard power supply used is with isolated topology to convert AC voltage to DC voltage which is delivered to the input.
- (4) Whole enclosure's power consumption.