

# Enerbatt 3G Battery Monitoring System

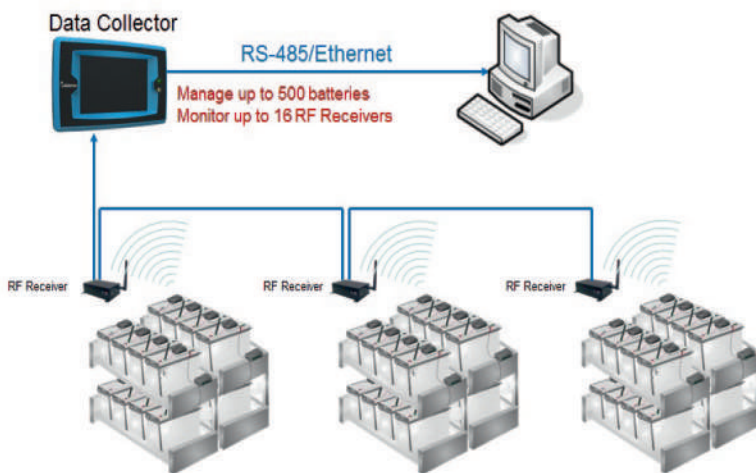
**WIRE-LESS  
Easy  
Configuration**



**No More Messy Cables!**



# ENERBATT 3G

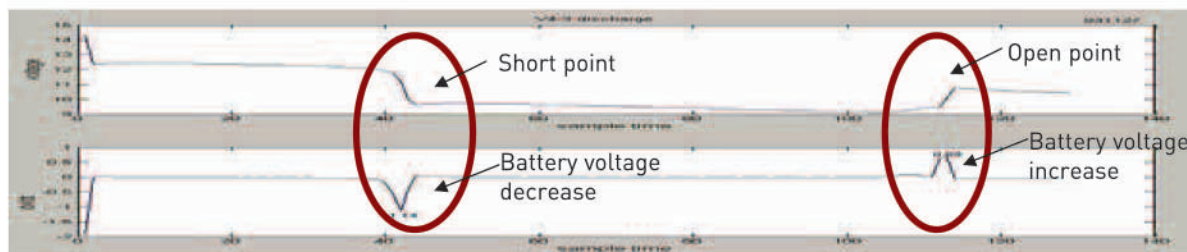


The Enerbatt 3G Battery Monitoring System is a complete solution for capturing important battery parameters at real time.

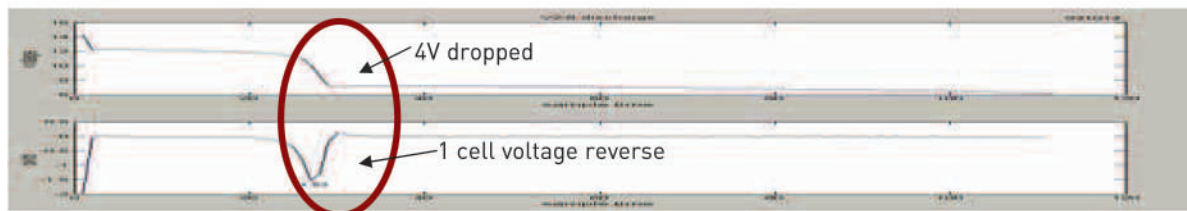
The BMS is able to communicate wirelessly, measure up to 500 nodes per system and record data in external memory cards to enable easy data access and backup security.

**The new BMS is able to detect various battery problems to ensure the batteries are in working conditions.**

## Battery Cell Short or Open



## Battery Cell Reversal

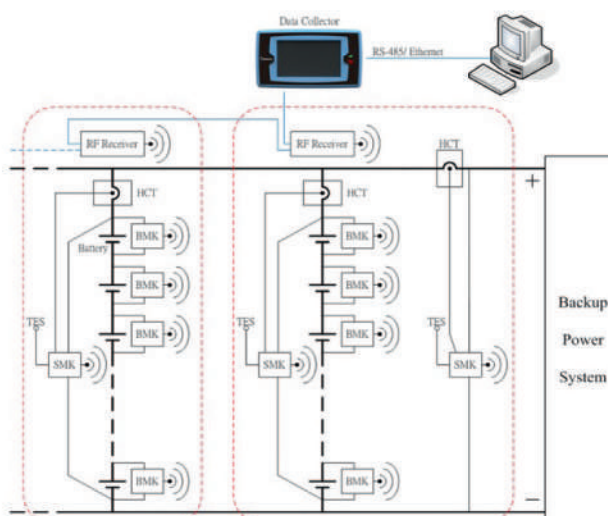


## Battery Cell Impedance

- determine impedance value of the internal battery cell

## Communication & protocol

- R.F 2.4G for wireless connection
- Wired communication via Ethernet TCP/IP, RS485





The Data collector comes with a large 7" LCD Screen with Graphic Touch function offering access and viewing of various batteries parameters.

## Functions of the Data Collector:

### Real-time Monitoring Information and Battery Test

- Battery Voltage, Battery Impedance, String Voltage, String Current and Environment Temperature

### Charts & Curves

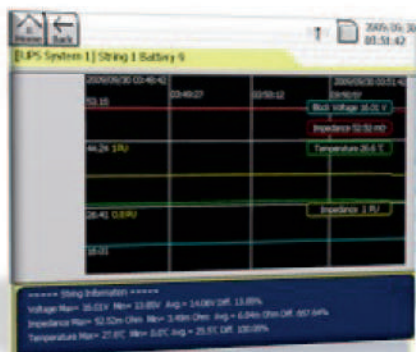
- Curve, Bar graph, Average

### Events Log

- Alarms via email & dry contact

### Sensor Network Manage

- Battery Configuration settings
- Networks Parameters settings



Data Readings

Block Table	Bar Graph	Percentage
NODE 1 Voltage Max 13.91V Min 13.80V Avg 13.85V Diff 0.11V Impedance Max 4.42 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 26.8°C Min 26.8°C Avg 26.8°C Diff 0.0°C	NODE 2 Voltage Max 14.00V Min 13.91V Avg 13.95V Diff 0.09V Impedance Max 4.04 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C	NODE 3 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C
NODE 4 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C	NODE 5 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C	NODE 6 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C
NODE 7 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C	NODE 8 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C	NODE 9 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C
NODE 10 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C	NODE 11 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C	NODE 12 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C
NODE 13 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C	NODE 14 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C	NODE 15 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C
NODE 16 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C	NODE 17 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C	NODE 18 Voltage Max 13.92V Min 13.80V Avg 13.85V Diff 0.12V Impedance Max 4.28 mΩ Min 1.03 mΩ Avg 1.03 mΩ Temperature Max 27.4°C Min 26.8°C Avg 27.1°C Diff 0.6°C

# TECHNICAL SPECIFICATION

GENERAL	
Operating Temperature	0°C~40°C
Relative Humidity	≤95% without condensing
Enclosure Dimension (W × H × D) mm	260 × 150 × 57
Supply Voltage	100 ~ 240Vac, 35 ~ 60Vdc
Power Consumption	18 Watts, maximum
Radio Frequency	RF 2.4G for wireless
Available Communication Port	Ethernet TCP/IP, RS 485, Input / Output Dry contact signal
Memory Type/Size	Inter-changeable 16GB SD/MMC flash memory card / Minimum continuous operation for 700 days
Monitoring Nodes Per System	Standard 500 nodes per system, Upgradeable to 750 nodes per system (Individual Battery block/cell + Battery String current/voltage)

BATTERY BLOCK MEASUREMENT			
Block Rated Voltage	2V	6V	12V
Block Voltage Measurement Range	1.5~4V	4.5~8V	9~16V
Resolution	1mV		
Accuracy	±10mV		
Input Impedance	≥1MΩ		
Temperature Measurement Range	0~100°C		

BATTERY STRING VOLTAGE MEASUREMENT	
Maximum Measurement Voltage	750V
Resolution	0.1V
Accuracy	±0.3V
Input Impedance	≥1MΩ
Temperature Measurement Range	0~100°C

BATTERY STRING CURRENT MEASUREMENT	
Maximum Measurement Current	3,000A
Resolution	0.1A
Accuracy	±0.3%

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Engineered by

