

# BDIT Intelligent Battery Monitoring System

## Device:

- BMS-802 : 2 volt battery **block** stethophone
- BMS-812: 12 volt Battery **block** stethophone
- BMS-600: Battery string stethophone
- BMS-GATE: Monitor control gateway with web view



BMS-802



BMS-812



BMS-600



MDR-20-24



BMS-GATE



Web View

## Monitoring and Records:

### 1. BMS-802-A / BMS-812-A Cell Sensor

- Cell Voltage
- Cell Temperature
- Cell Internal Impedance (Ohmic Value)
- Balancing function (only for BMS-802-B & BMS812-B)

### 2. BMS 600 String Sensor

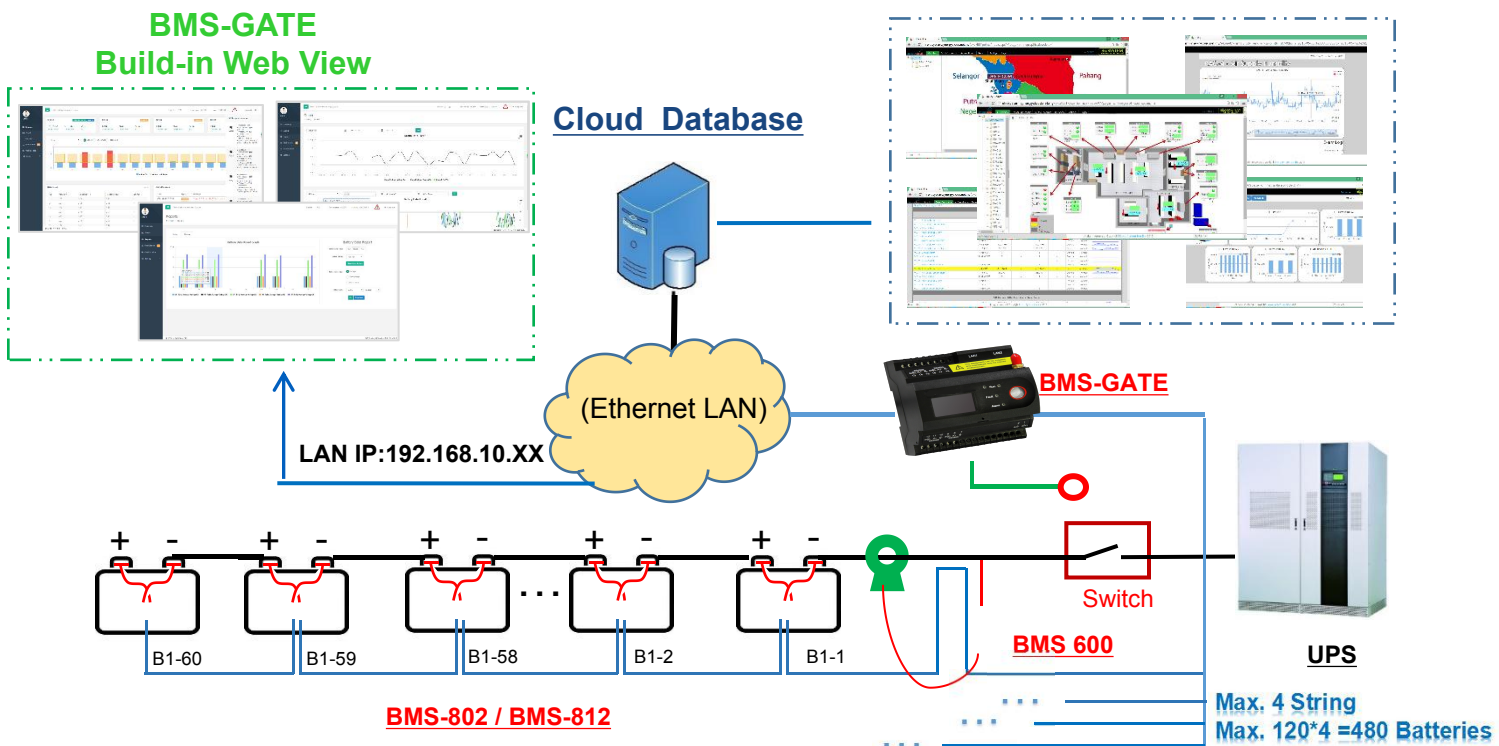
- String Voltage
- String Current
- SOC & SOH
- Balancing function extends battery life
- Batch Set Address
- Judge charging and discharging status
- Each BMS600 Max. Connect **120pcs** BMS-802/ BMS-812

### 3. BMS-Gate Intelligent Gateway

- Measuring of Max. 480pcs Batteries in up to 4 Parallel Strings.
- Calculate SOC & SOH of Each Battery Cell & Battery String
- Discharge Graphs Record
- Balancing Function
- Alarm for Cell Voltage, Temperature, Internal Impedance, SOC (High / Lower Limit)
- Alarm for String Voltage, Current, Average Internal Impedance, SOC (High / Lower Limit)
- Data Logging for All Measuring Data (12 Months)
- Support Measure Ambient Temperature & Humidity

Item	Voltage	Temperature	Internal resistance	Power Consumption
BMS-802	1.6V to 2.6V ( $\pm 0.2\%$ )	-20°C to 85°C ( $\pm 1.0^\circ\text{C}$ )	0.1mΩ to 100mΩ Repeatability Error: $1.0\% \pm 25\mu\Omega$ Conformity Error: $1.5\% \pm 25\mu\Omega$	Runing:170mW, Sleeping:12mW
BMS-812	7.5V to 15.6V ( $\pm 0.2\%$ )			Runing:120mW, Sleeping:10mW
BMS 600	0V to 800V ( $\pm 0.5\%$ )	String Current: -1000A ~ +1000A (By Hall sensor)		1W

## System Structure:



LAN IP:192.168.10.XX

Cloud Database

(Ethernet LAN)

Integrate to DCIM System

BMS-GATE

Switch

BMS 600

UPS

BMS-802 / BMS-812

Max. 4 String  
Max. 120\*4 =480 Batteries

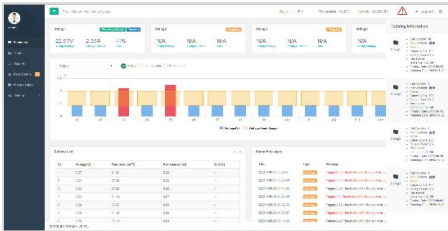
## ❖ BMS-Gate Intelligent Control Gateway

### Feature:

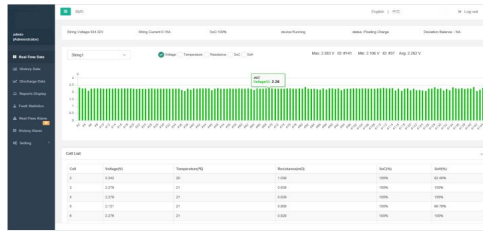
- 4 RS485 Port, MODBUS Communication
- 2 Ethernet Port, Transmit Data & Alarm to Cloud Server by Ethernet
- Build-in Web Server, Display Data By Web View Pages
- 8GB TF Card for 12 Months Data Logging
- Support Export JPG, PDF, XLS etc..Document
- Real Time & History Data Records and Graphs Analysis for Battery Life Trending
- 24/7 On-line Alarm Management and Reporting



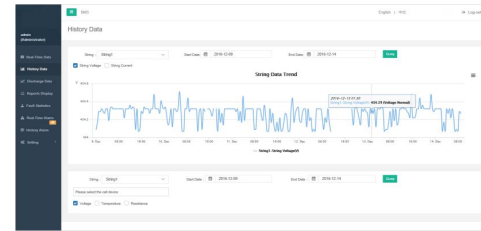
### Summary



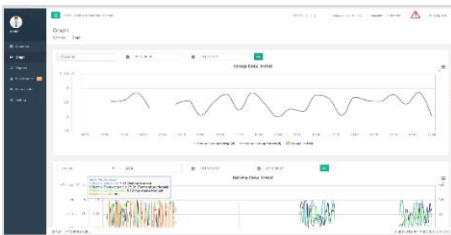
### Real-time Data



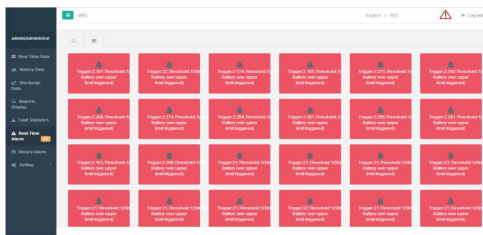
### Historical Data



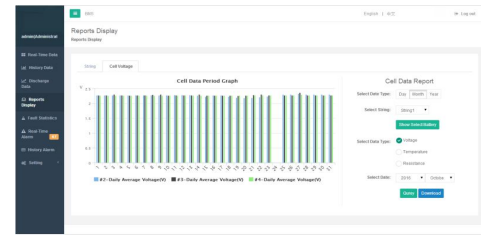
### Analysis



### Alarm



### Report



### Technical Specification:

Hardware			
<b>CPU</b>	ARM Cortex A8 800MHz	<b>Memory</b>	512MB RAM, 512MB Flash and 8GB TF memory card.
<b>Operating system</b>	Embedded Linux	<b>Communications</b>	4 RS485 serial ports, 2 Ethernet Port (10/100M)
<b>Display</b>	LCD with High Resolution	<b>Power supply</b>	DC18V ~36V
Others			
<b>Weight</b>	650g	<b>Operation Temperature</b>	-15°C ~ +55 °C
<b>Dimension</b>	90mmX94mmX68mm	<b>Operation Humidity</b>	10% ~ 95% Non-condensing
<b>Power Consumption</b>	< 5W	<b>Safety standard</b>	CE

### Order Information:

System Structure	Order Code	Description
Communication Layer	<b>BMS-GATE</b>	Monitor Control Gateway With Web View
Power Supply	<b>MDR-20-24</b>	24Vdc Power Source, 220Vac to 24Vdc
String Sensor	<b>BMS 600</b>	Battery String Sensor
	<b>Hall Sensor</b>	CS050EK1T5 (Rated input: 50A, Measure Range: 0~±100A, Φ20mm)
		CS100EK2T5 (Rated input: 100A, Measure Range: 0~±200A, Φ40mm)
		CS200EK2T5 (Rated input: 200A, Measure Range: 0~±400A, Φ40mm)
CS400EK2T5 (Rated input: 400A, Measure Range: 0~±800A, Φ40mm)		
Cell Sensor	<b>BMS -802</b>	2 volt battery One-One cell sensor
	<b>BMS-812</b>	12 volt battery One-One cell sensor

