

## Device:

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



GN-BMS-802



GN-BMS-812



GN-BMS-600



GN-MDR-20-24



GN-BMS-GATE



Web View

## Monitoring and Records:

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

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

### 2. GN-BMS-600 String Sensor

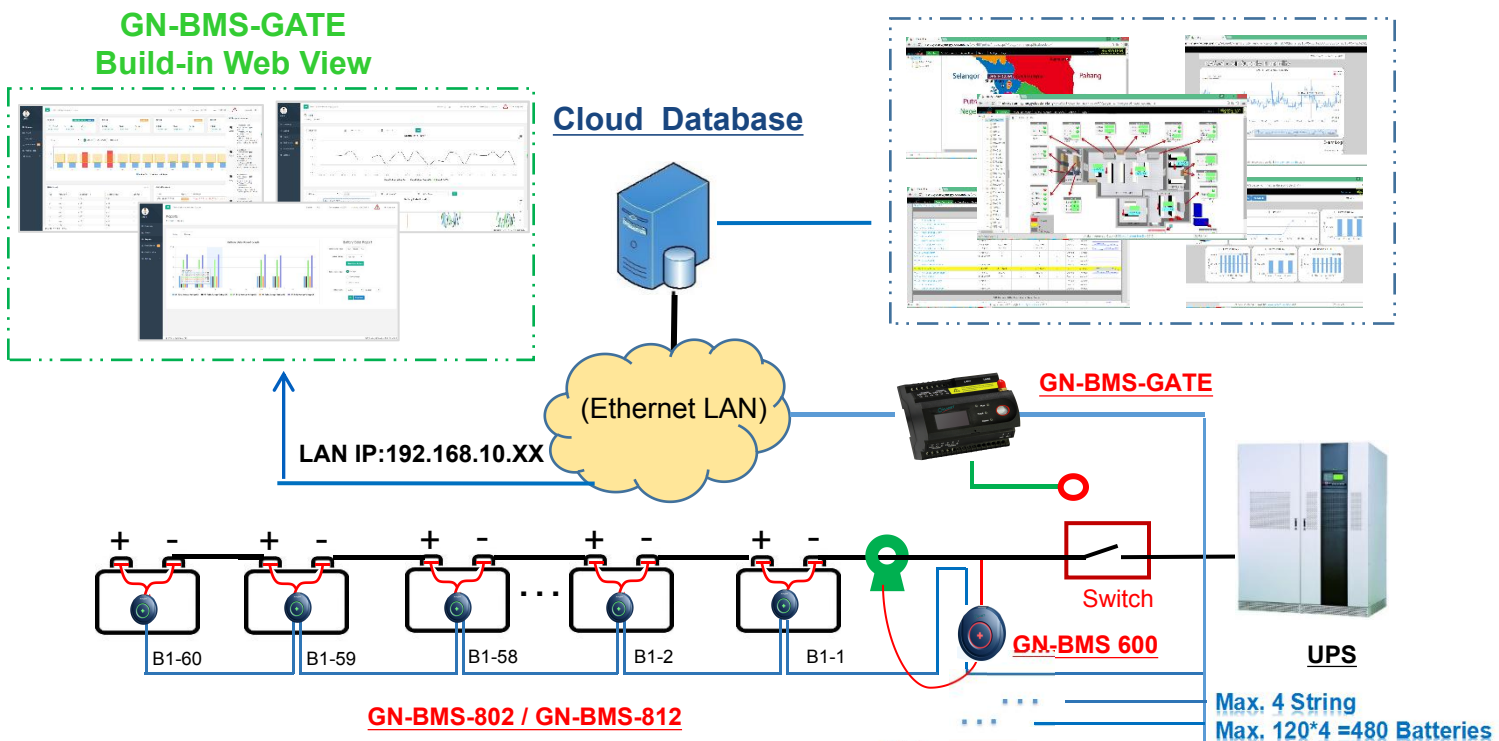
- String Voltage
- String Current
- SOC & SOH
- Balancing function extends battery life
- Batch Set Address
- Judge charging and discharging status
- Each GN-BMS-600 Max. Connect **120pcs** GN-BMS-802/ GN-BMS-812

### 3. GN-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
GN-BMS-802	1.6V to 2.6V ( $\pm 0.2\%$ )	-20°C to 85°C ( $\pm 1.0^\circ\text{C}$ )	0.1m $\Omega$ to 100m $\Omega$ Repeatability Error: 1.0% $\pm 25\mu\Omega$ Conformity Error: 1.5% $\pm 25\mu\Omega$	Runing:170mW, Sleeping:12mW
GN-BMS-812	7.5V to 15.6V ( $\pm 0.2\%$ )			Runing:120mW, Sleeping:10mW
GN-BMS 600	0V to 800V ( $\pm 0.5\%$ )	<b>String Current:</b> -1000A ~ +1000A (By Hall sensor)		1W

## System Structure:



## Integrate to DCIM System

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

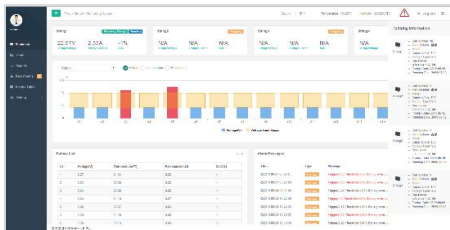
# GN-BMS-Gate Intelligent Control Gateway

## Feature:

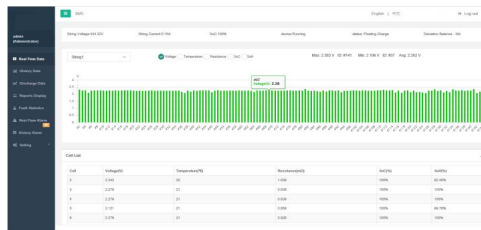
- 4 RS485 Port, MODBUS Communication
- 2 Ethernet Port, Transmit Data & Alarm to Cloud Server by Ethernet
- Build-in Web Server, Display Data By Web View Pages
- 8GB TF Card for 12 Months Data Logging
- Support Export JPG, PDF, XLS etc..Document
- Real Time & History Data Records and Graphs Analysis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



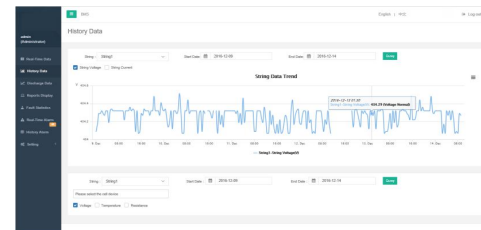
### Summary



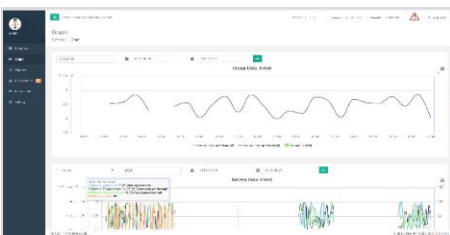
### Real-time Data



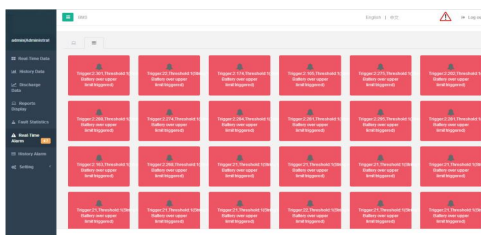
### Historical Data



### 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
<b>Communication Layer</b>	<b>GN-BMS-GATE</b>	Monitor Control Gateway With Web View
<b>Power Supply</b>	<b>GN-MDR-20-24</b>	24Vdc Power Source, 220Vac to 24Vdc
<b>String Sensor</b>	<b>GN-BMS 600</b>	Battery String Sensor
	<b>Hall Sensor</b>	GN-CS050EK1T5 (Rated input: 50A, Measure Range: 0 ~ ±100A, Φ20mm)
		GN-CS100EK2T5 (Rated input: 100A, Measure Range: 0 ~ ±200A, Φ40mm)
		GN-CS200EK2T5 (Rated input: 200A, Measure Range: 0 ~ ±400A, Φ40mm)
		GN-CS400EK2T5 (Rated input: 400A, Measure Range: 0 ~ ±800A, Φ40mm)
GN-CS500EK2T5 (Rated input: 500A, Measure Range: 0 ~ ±1000A, Φ40mm)		
<b>Cell Sensor</b>	<b>GN-BMS -802</b>	2 volt battery One-One cell sensor
	<b>GN-BMS-812</b>	12 volt battery One-One cell sensor

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