



# BATTERY MONITORING SYSTEM

Battery Monitoring Systems (BMS) are essential for maintaining the optimal performance and lifespan of batteries used in diverse applications, including UPS systems, data centers, telecommunication base stations, and solar energy storage units. These systems feature intelligent monitoring capabilities designed to track the health, status, and performance metrics of individual batteries and battery groups.

A prominent example is the Exagate Battery Monitoring System, renowned for its advanced features such as a built-in web server and a mobile-compatible web-based monitoring interface. This enables users to conveniently access real-time data and insights regarding the condition and operation of their battery systems from any location with internet connectivity.



## 7/24 Monitoring & Balancing, Real Time Battery Alarm

- **Online monitoring:** Voltage, temperature, impedance, charge and discharge status, state of charge (SOC), state of health (SOH)
- **Online auto-balancing:** automatically balancing charge differences between batteries in order to keep maximum uptime and lifespan of the battery.



## All In One System with Mobile, SMS & E-mail Alerts

- Mobile compatible system for remote management
- Multiple contact for SMS / E-mail alerts



## Easy to Set-Up & Operate

- Easy to use browser
- User friendly Interface



## BATTERY STRING MONITORING SENSOR

- String voltage
- String current
- Calculate string SOC (State of charge)
- Charging and discharging status of battery
- Auto-balancing function



## BATTERY MONITORING SENSOR

- Individual cell voltage
- Individual cell temperature
- Individual cell internal impedance (Ohmic value)
- Individual cell SOC (State of charge)
- Individual cell SOH (State of health)
- Auto-balancing function

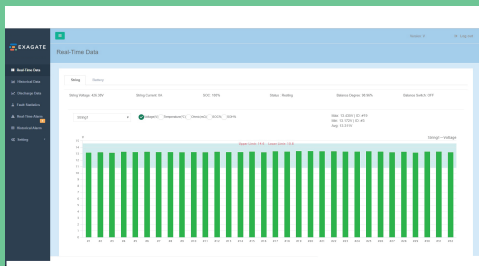
## GATEWAY

- Embedded web-server and database
- Access to 4 strings and up to 480 sensors
- Battery and battery string alarm
- Data retrospection and alarm recording
- Automatic battery balancing function
- SMS alarm
- 2 ethernet ports, modbus TCP and SNMP communication
- Ambient temperature and humidity measurement support

## System Functions

### Real Time Monitoring

- Battery temperature, voltage, impedance, SOC and SOH monitoring
- Battery string voltage, charge and discharge status monitoring
- Temperature and humidity measurements
  - Auto-Balance function for batteries
  - Battery string status
  - Battery sensor status



### Historical Data Analysis

- Historical data analysis and archiving function for battery voltage, temperature, impedance, SOC and SOH
- Battery string graphics for voltage and SOC
- Historical charge and discharge data for batteries
  - Battery alarm and system alarms

