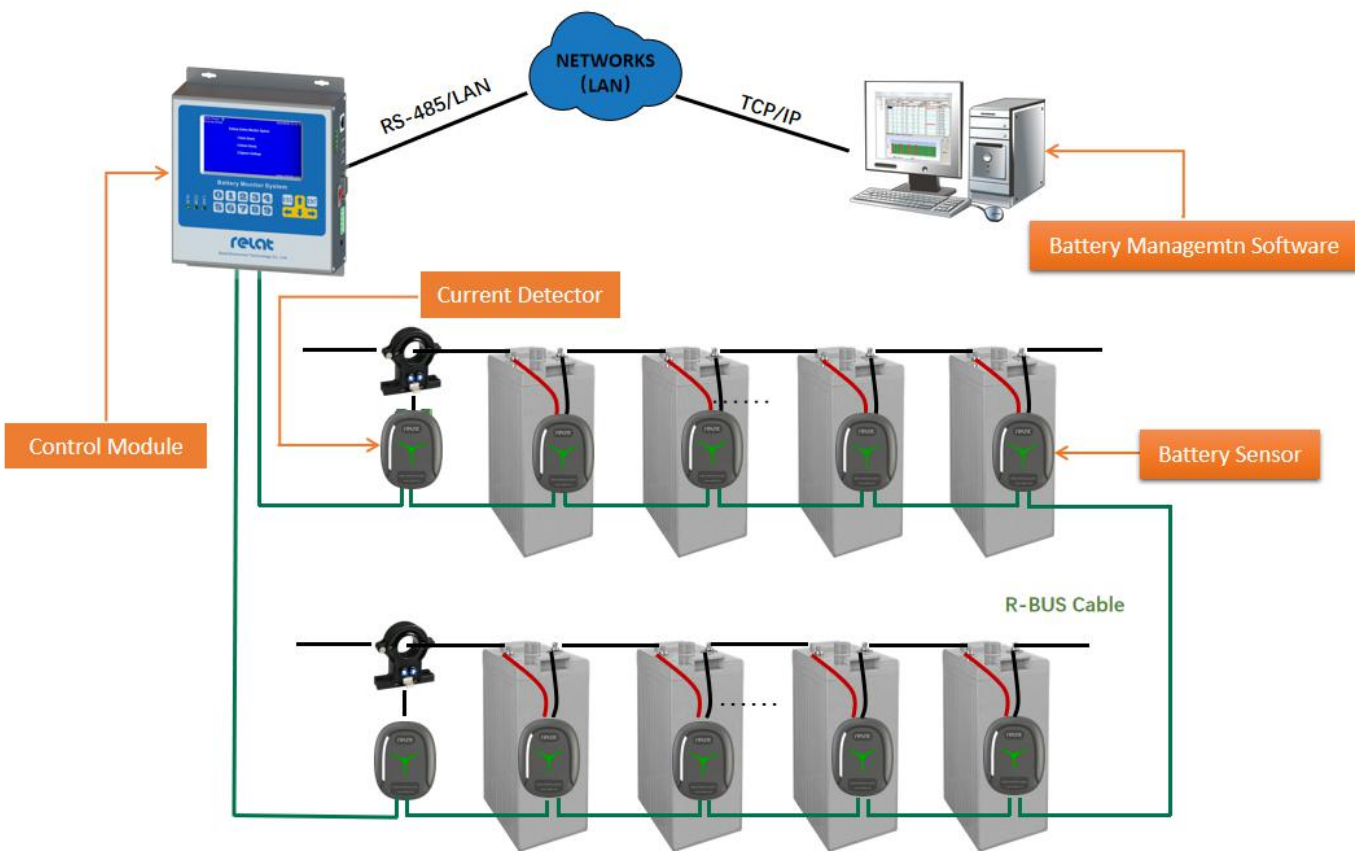


7X24 Hours Real Time Battery Monitoring System for Lead Acid Batteries

BMS Overview

Modular Level Design
Each BMS composed with

- ▶ Control Module
- ▶ Current Detector along with Current Transducer
- ▶ Battery Sensor
- ▶ Battery Management Software



Accessories



① Battery Cable ② R-bus Cable ③ Long R-bus Cable

④ CT communication cable ⑤ Power cable for Control Module

⑥ Power cable for Current Detector ⑦ Kelvin Washer ⑧ RJ11 Connector



⑦

⑧

7X24 Hours Real Time Battery Monitoring System for Lead Acid Batteries

BMS Components

Control Module

- ▶ It collections of all battery data, alarm analysis and upload all the data.
- ▶ It allows to set up and manage all Battery Sensors and Current Detectors.
- ▶ It generates audible alarm and provides 1 nos of volts free contact.
- ▶ It communicated with Modbus TCP or Modbus RTU protocol.
- ▶ It stores for up to 300 PCS history alarm.
- ▶ It stores of 24 hours data and one year data.
- ▶ It interface via RS232/RS485 and Ethernet for reading data.
- ▶ It comes complete set with the battery management software.
- ▶ Each set of UPS will require 1 unit of Control Module
- ▶ Each unit will allow to monitoring up to 254 block batteries, up to 6 strings of 42 blocks batteries.



Current Detector

- ▶ It measures the bank current during float, charge and discharge.
- ▶ It will send all the measured data to the control module.
- ▶ Its measurement ranged from 0 A to 1000 A and its accuracy is $\pm 1\%$.
- ▶ It should tie-in use with Current Transducer (CT).
- ▶ Each battery string/bank requires for one unit of Current Detector.
- ▶ Each control module allow to connect up to 6 unit of Current Detector.
- ▶ No.1 current detector will embed the ambient temperature probe.



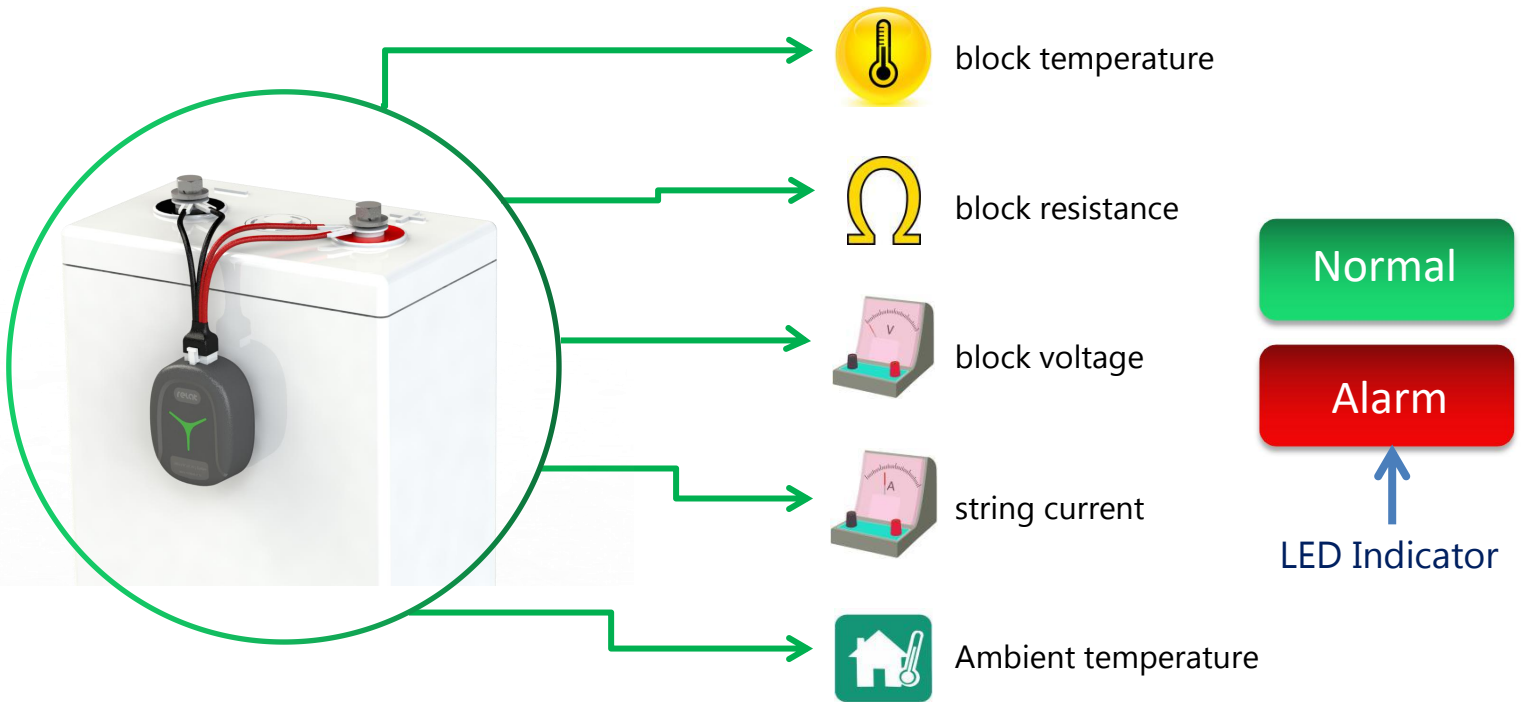
Battery Sensor

- ▶ It measures the individual block voltage, temperature and internal resistance.
- ▶ It will start the corresponding measurement when received the command.
- ▶ It will send all the measured data to the control module.
- ▶ Its voltage measurement ranged from 1.5V to 16V and its accuracy is 0.2%.
- ▶ Its temperature measurement ranged from -10 to 70 °C. and accuracy is $\pm 1^\circ\text{C}$.
- ▶ Its internal resistance range from 0.01m Ω ~ 80 m Ω and accuracy is 2%.
- ▶ Bank Voltage range is from 0-1000V and the accuracy is 0.2%+0.2V.
- ▶ Each block will require 1 unit of Battery Sensor.
- ▶ Each control module allow to connect up to 254 units of Battery Sensor.

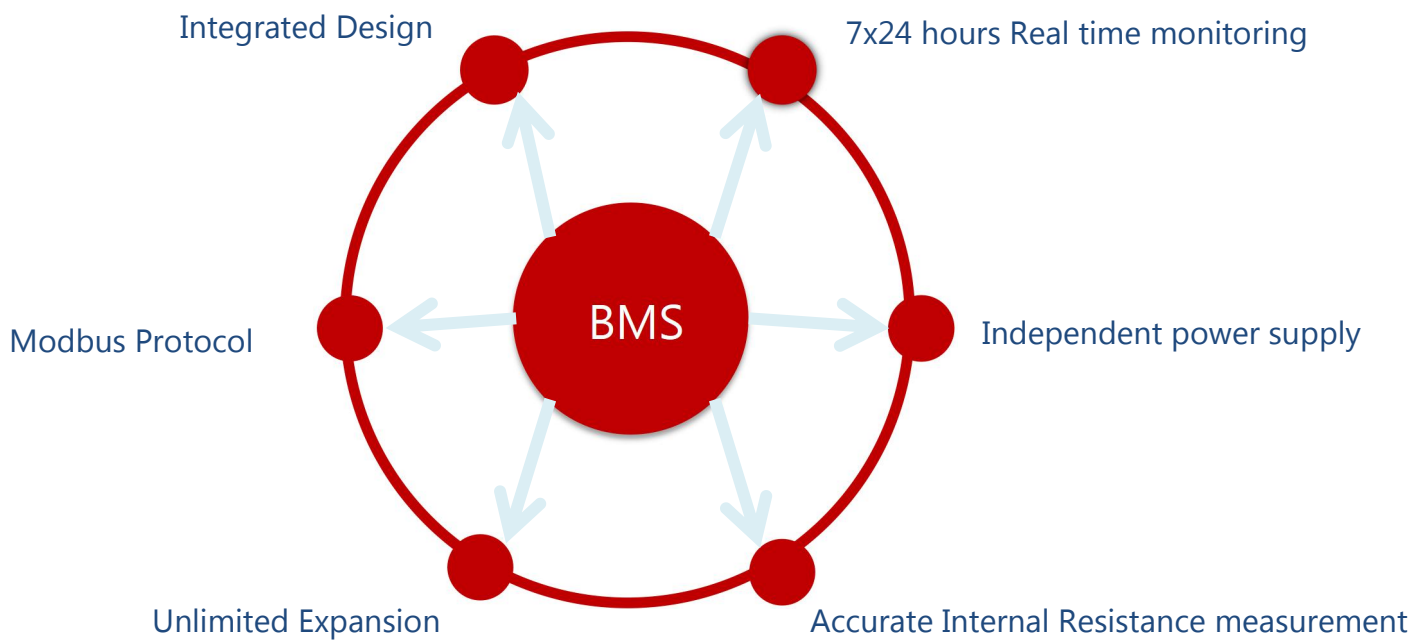


7X24 Hours Real Time Battery Monitoring System for Lead Acid Batteries

BMS Monitoring Parameter



BMS Feature



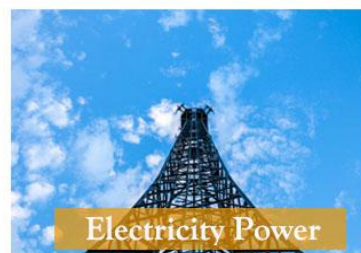
7X24 Hours Real Time Battery Monitoring System for Lead Acid Batteries

BMS Advantages

- 01 | 20+ years specializing in circuit design and electronics reliability analysis
- 02 | With a team of professional engineers and salesmen
- 03 | Designed to allow IEEE1188 best practice
- 04 | Plused AC test method is better and more accurate
- 05 | Trending graphs & details report generate from PC software
- 06 | Extremely easy maintenance and installation
- 07 | Cost effective price includes 12 months warranty

BMS Application

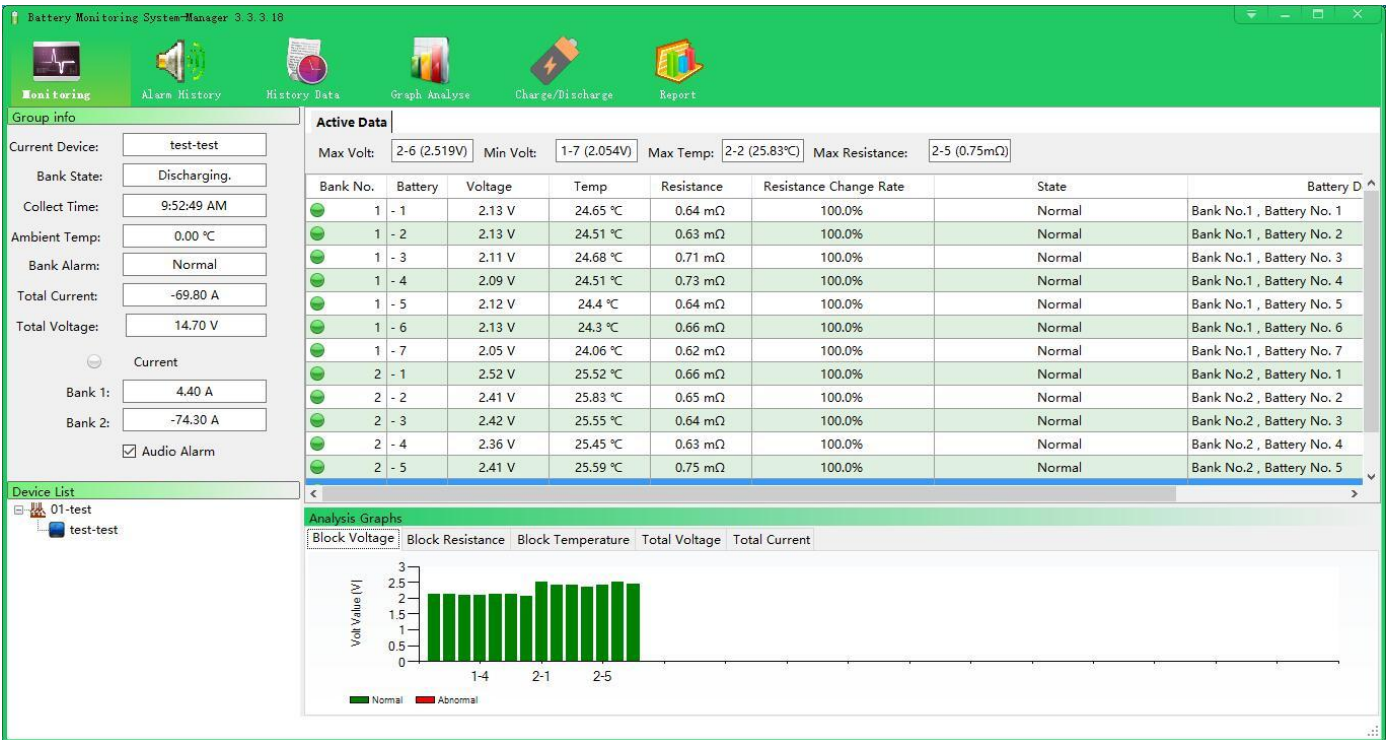
BMS were deployed to various sector like banking, government, data center, airport, IT company, electricity and etc.



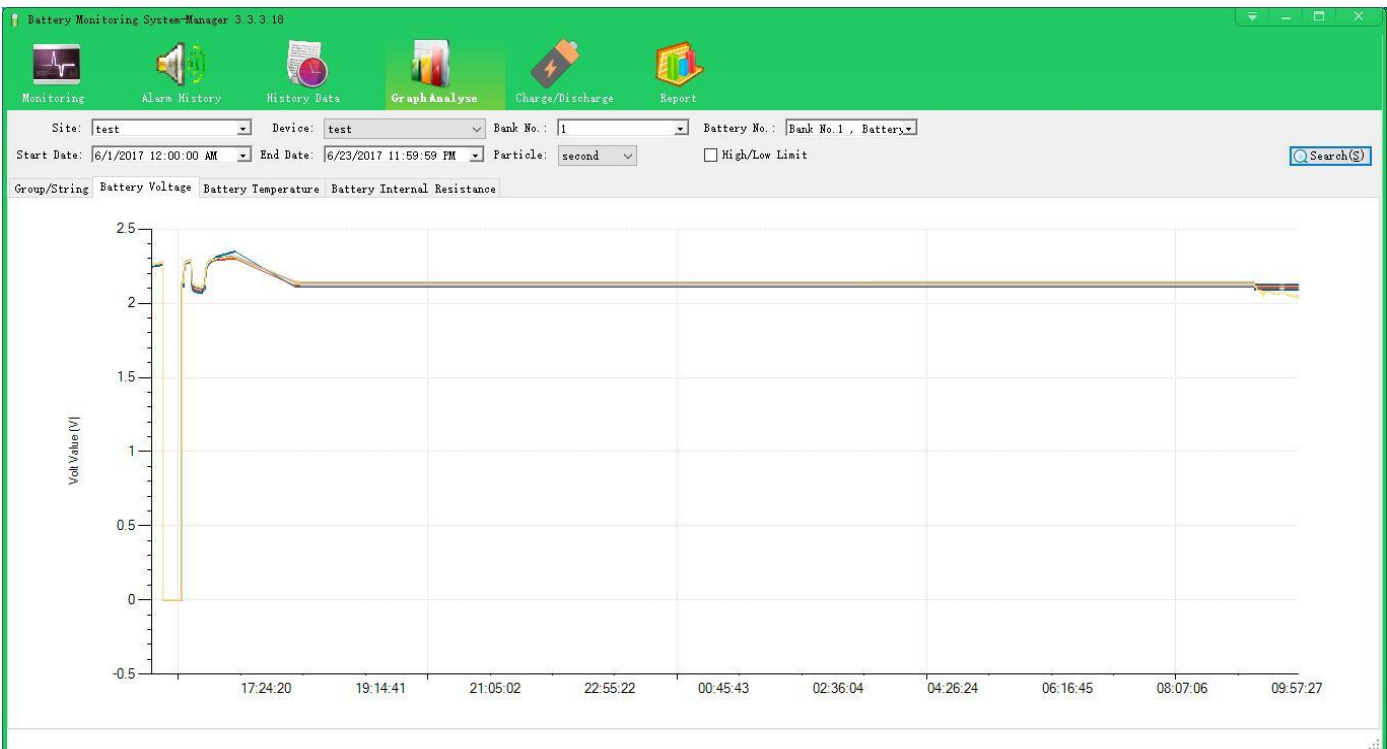
7X24 Hours Real Time Battery Monitoring System for Lead Acid Batteries

Battery Management Software

Real Time Monitoring Screenshot



Graph Showing Page Screenshot

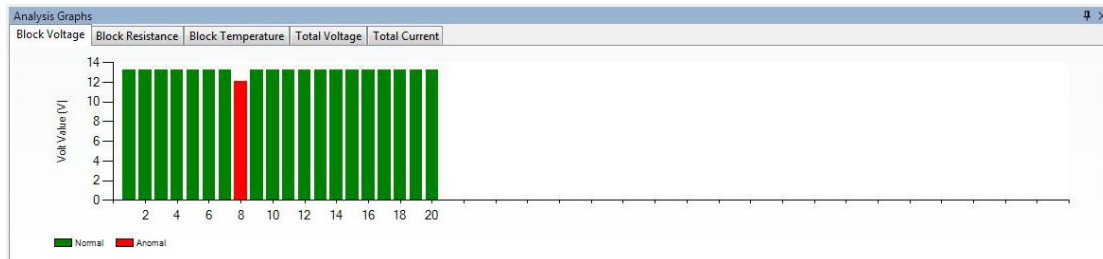


7X24 Hours Real Time Battery Monitoring System for Lead Acid Batteries

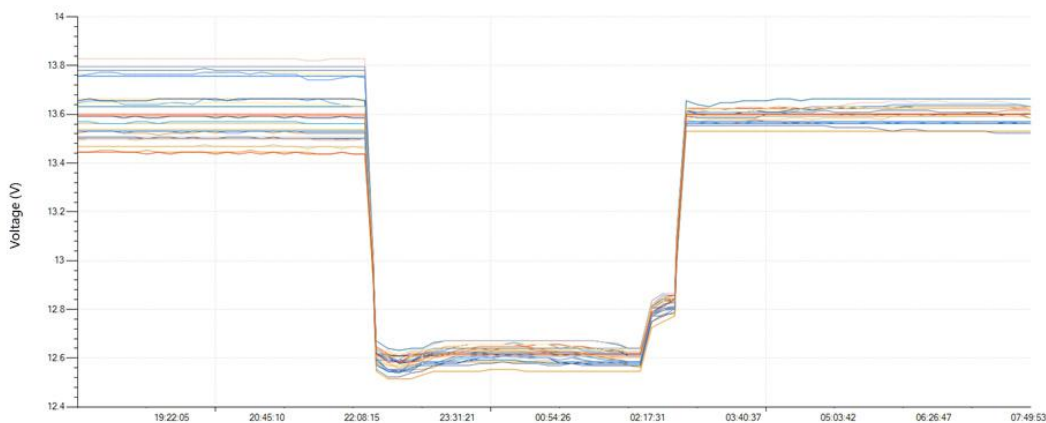
Battery Management Software

BM3000 BMS comes complete with Battery Management Software package which allows all battery systems to be monitored 7 x 24 hours via a remote computer. It allows for remote viewing and data management of all connected battery monitoring systems. Report generation, trending analysis, & detailed alarming can all be viewed on a single or multiple PC's on the same network.

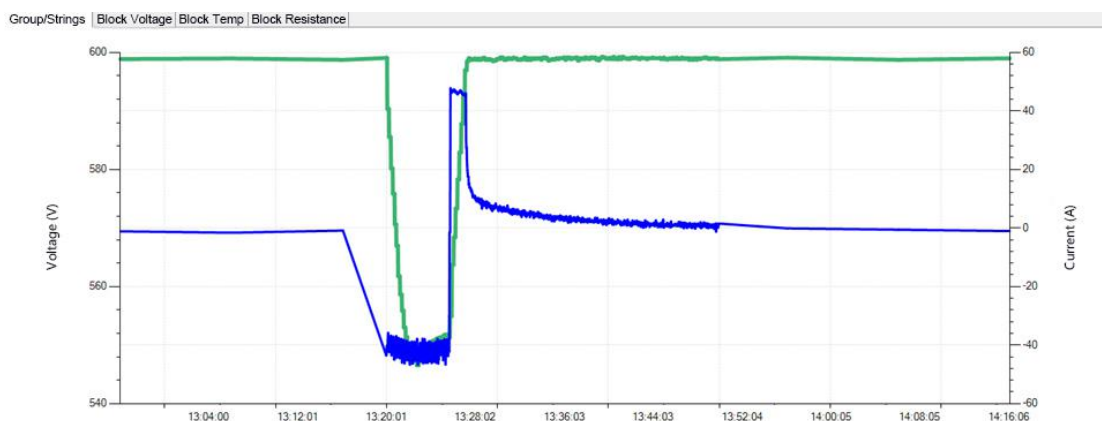
Block voltage bar graph,



Block voltage trending graph,



Discharge & Charge trending Graph,



7X24 Hours Real Time Battery Monitoring System for Lead Acid Batteries

Install at Site





7X24 Hours Real Time Battery Monitoring System for Lead Acid Batteries

Value to Customer

- 01 Reduce power outages by detecting battery problems at an early stage
- 02 Increase personnel safety, less human presence in battery room
- 03 Reduce maintenance cost avoiding the weak battery infect
- 04 Extending your batteries life

Relat's Partner

We have deployed battery monitoring systems in over 500 installations over the last 13 years for various sector, and build a credible reputation with quality product and best service.



Singapore-Malaysia-Thailand-Vietnam-Brazil-Saudi Arabia-UAE-Norway-Hungary-Mexico-South Africa-South Korea-Mexico-Philippine-Indonesia-China HK-Taiwan and other area