TeleMoment

Battery Monitoring System
Satellite II

Main Features:

- **Real time monitoring of individual cell voltage, temperature, impedance and string charging and discharging current**

- **Battery Friendly, absolutely no harm**

- **Isolated power supply and never consume or drain battery current**

- **Historic Data Storage and exportable to spreadsheet**

- **Alarm Setting and Management**

- **Data or Trend Analysis**

- **Communication: Volt-free contacts or TCP/IP Network communication**

When there is a need for high-power storage, a significant number of batteries must be installed, making the performance of each battery block critical. Therefore, a battery monitoring system is essential to ensure that each battery block operates within acceptable parameters, anticipate potential failures or risks, and analyze the actual battery capacity or state of charge in real-time.

The TeleMoment Battery Monitoring System is among the most advanced solutions on the market, featuring the latest patented technology.

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LOCAL MONITORING MASTER

- Each Master unit is capable of connecting maximum four individual battery strings
- Web accessible user interface
- Local graphical display and storage of all battery data
- Basic battery alarms, analysis and reporting
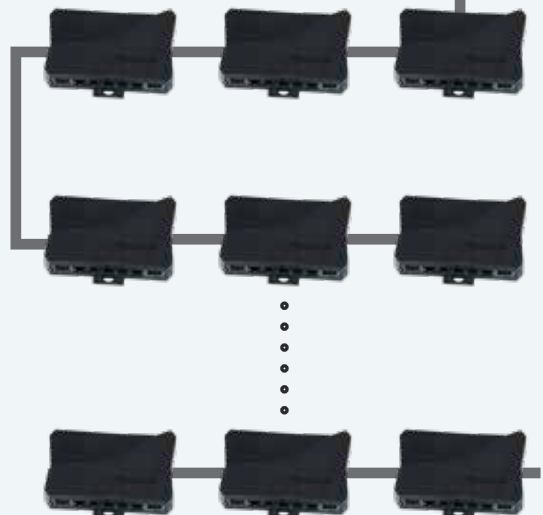- WiFi connectivity can be enabled
- LAN port communication

STRING / CT MODULE

- Continuously measuring and monitoring of battery string current including any AC ripples
- Battery room temperature and humidity measurement
- Dry contact output for common/general alarm within the system

**Dry Contacts   CT**

BATTERY SENSING MODULE

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BATTERY SENSING MODULE

- Measuring of battery block terminal voltage and cell temperature
- Measuring of the battery block internal impedance from current and voltage data
- Each sensing module takes measurement and monitoring of four consecutive battery blocks.
- Battery cell temperature is measured at the negative pole according to IEEE1188.
- Innovative battery internal impedance measurement method that never inject/drain any voltage or current into or from the battery. An absolute harmless system to the battery, truly battery friendly.

## BATTERY SENSING MODULE

BATTERY BATTERY BATTERY BATTERY
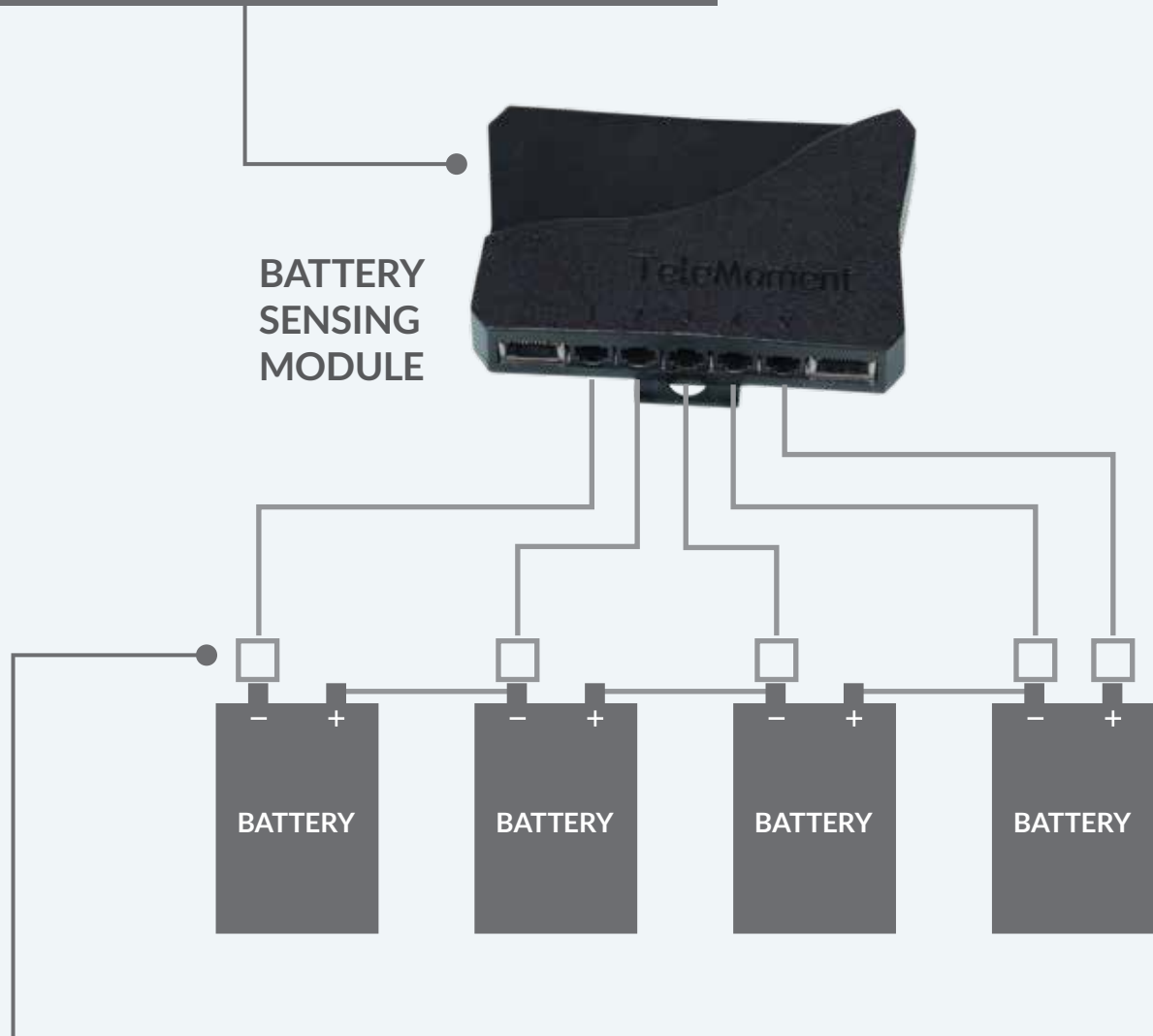
BATTERY TERMINAL ADAPTER
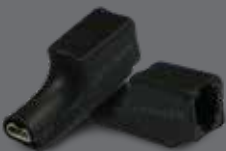
- Easily plugged to the battery terminal interfacing the Battery Sensing Module to the battery blocks.
- Build in fast reacting fuse to protect every sensing cable right from the point of power, the battery terminal.
- Battery is attached directly to the battery.
- Make installation and maintenance safe, easy, and fast.

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LOCAL DISPLAY ON THE MASTER UNIT

Main Page
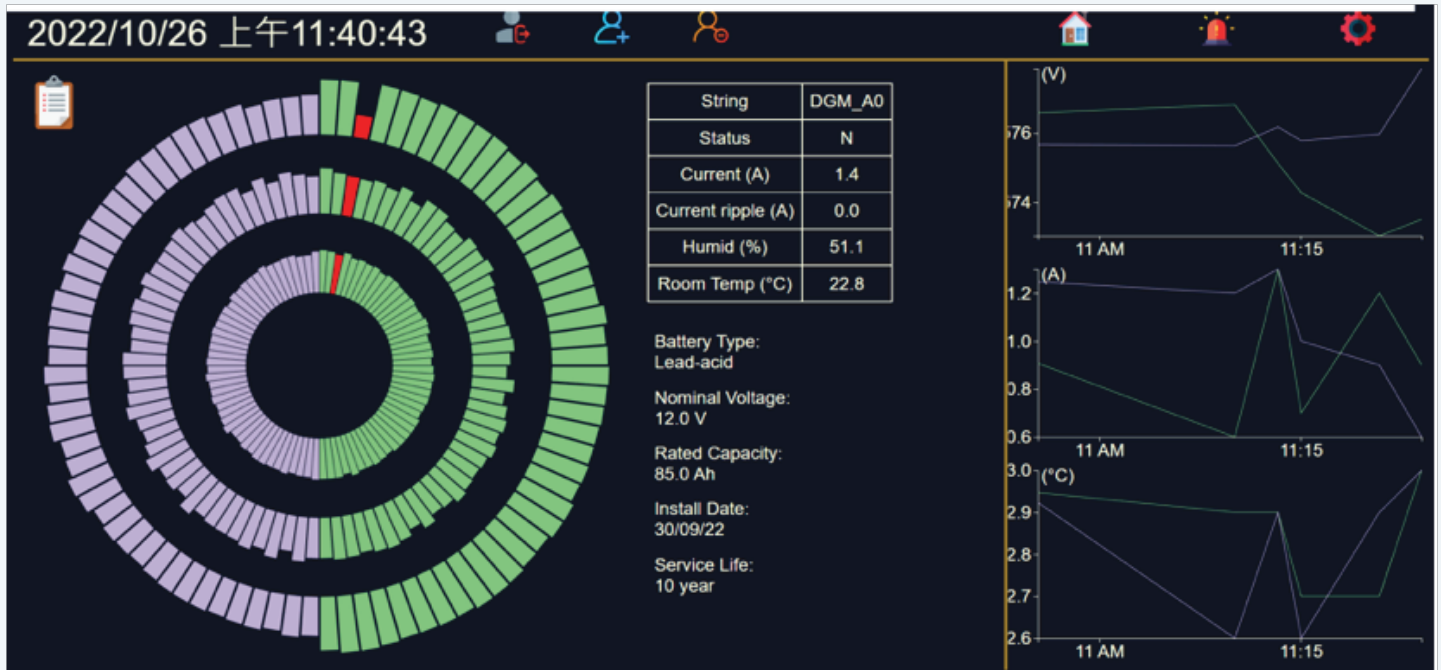
Solar bar chart and historical graph for easy recognition of any alarm or outstanding conditions.

Individual Battery status

Mouse over to display individual battery cell data

## Battery String Real-time Summary

Battery data in table form

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TELEMOMENT SERVER

The Server is designed to connect and monitoring of almost unlimited amount of battery systems through a TCP/IP network that connect to every Local Monitoring Master.

Thanks to our unique solar bar chart design, tens of thousands of battery blocks distributing in hundreds of installation locations can be clearly monitored and managed in a single screen.

Advanced analysis and management reports together with user management.
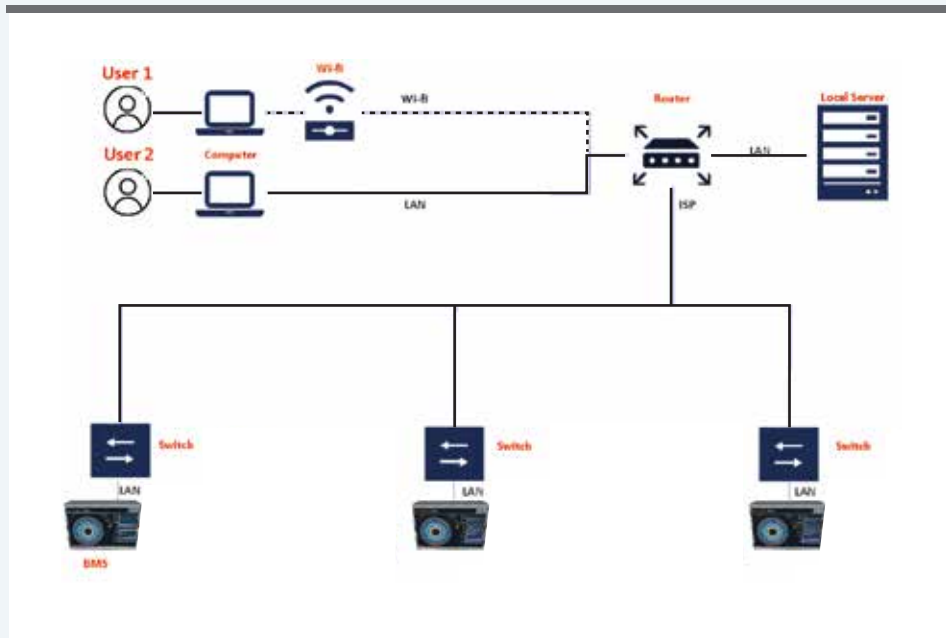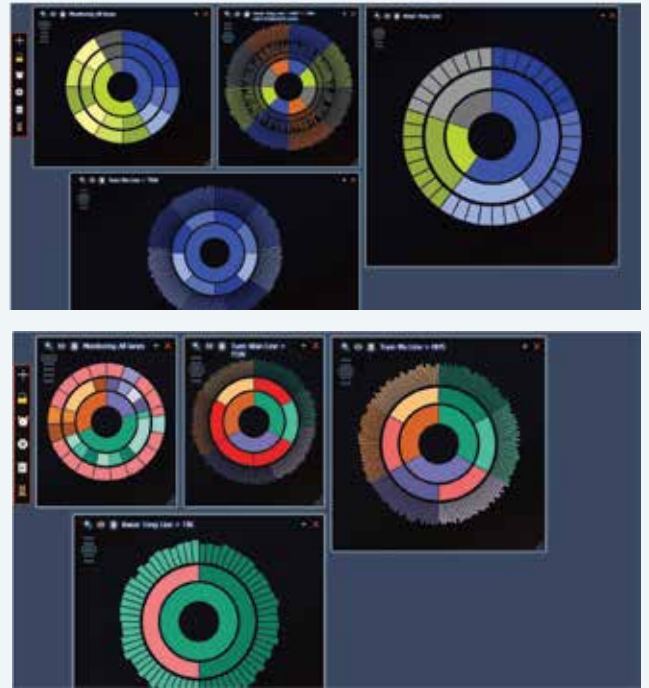
Network Architecture Diagram (Local Server)
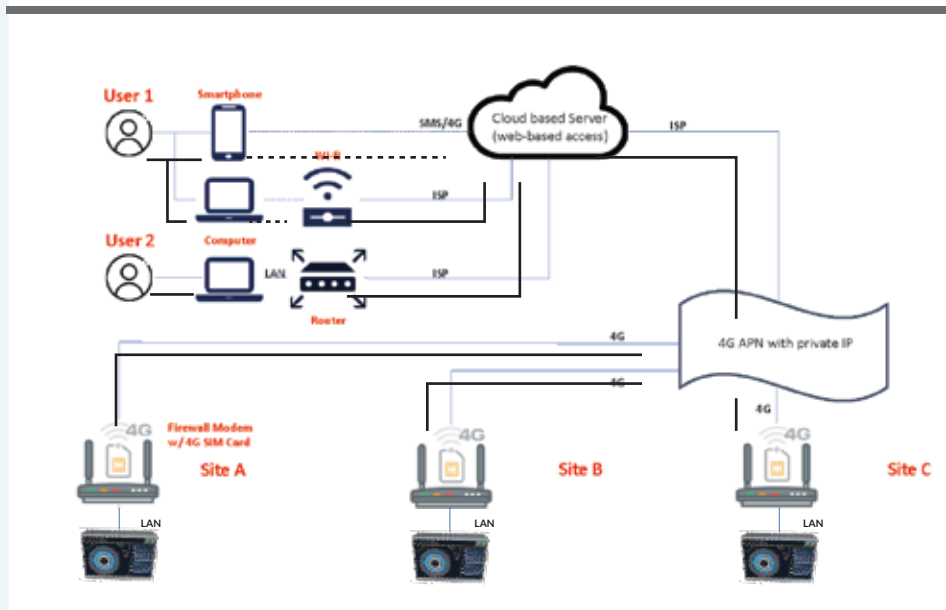
Network Architecture Diagram (Cloud Server)

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BASIC PARAMETERS

PARAMETERS	RESOLUTION	MEASUREMENT RANGE
Battery Terminal Voltage	1mV	0 Vdc - 16 Vdc nominal
Battery internal impedance	0.01mΩ	0.1mΩ - 60mΩ
Battery terminal temperature	0.1°C	-20°C to 99°C
String DC current	0.05A	Depends on CT
String Ripple current (AC)	0.1A	True RMS
Ambient Temperature	0.1°C	-20°C to 99°C
Relative Humidity	1%	0 - 100%

- Operating ambient temperature: 0 to 40°C
- Relative humidity: up to 90%