

OREON 7 AI Data Solutions

Knowing Battery Analytics

Integrating smart diagnostics into battery monitoring systems can greatly improve energy efficiency. By leveraging data analytics and machine learning, these systems can identify performance trends and potential issues early on. This predictive maintenance approach allows for proactive interventions, minimizing downtime and ensuring that batteries consistently operate at their best. Keeping the systems running efficiently not only boosts performance but also optimizes energy consumption.

High accurate algorithms with intelligence

Discover the Power of BMS Solutions

OREON 7 Battery Monitoring System

A Product of



Revolutionizing Battery Monitoring with Oreon7

The Oreon 7 battery monitoring system is a sophisticated electronic device designed to optimize the performance, safety, and longevity of batteries. By continuously monitoring and analyzing various key parameters, it provides valuable insights and alerts to users, ensuring reliable and efficient battery operation.

Battery Parameters Monitored

Cell Voltage	Cell Impedence	Cell Temperature	String Voltage	String Current	Ambient Temperature	SOC & SOH
Records Individual voltage of the battery with high-tech measurement methods	Accurately measures the Internal resistance of the battery with various advanced algorithms.	Measures the cell temperature at every instance of negative polarity for each battery.	Measures the string voltage of the System.	Measures the String level current. The String current defines the profiling of the states of the system.	Measures the ambient temperature of the battery room at specific point.	Provides the strong insights of battery state of charge and state of health by advanced computations.

BMS Features

Intelligent Charging & Discharging Profile

Data Logging & Analysis



Real Time Monitoring



Early Warning System



Remote Monitoring & Control

BMS Benifits

Downtime Prevention

Production stoppage reduced, increase in safety and higher savings on annual preventive maintenance

Thermal Runaway Prevention

Prevents hazardous situations like overcharging, over-discharging, overheating, or short-circuiting. Monitors and mitigates risks such as thermal runaway

Increase Shelf Life of Battery

Monitors and controls charging cycles to minimize degradation. Maintains cells within safe operating parameters, reducing wear and tear

Minimizing Carbon Footprint

The assigned support team or individual investigates the reported issue or fulfills the requested service.

Cost Savings

Reduces long-term costs by prolonging battery life and improving energy efficiency.. Prevents the need for frequent replacements or emergency repairs.

Data Logging & Analytics

Tracks battery performance metrics over time.. Aids in diagnosing faults, identifying trends, and optimizing usage patterns.



Alarms & Notifications

- System related alarms
- Battery voltage alarms
- String voltage alarms
- Communication alarms
- General status alarms
- Alarm Summary
- SoC-SOH Alert



Communications

- MODBUS RTU/RS
- SNMP
- TCP/IP (optional)
- Dry Contact
- DNP3 (optional)
- IEC 61850 (optional)



Software

- Windows 10 Support
- User friendly dashboard
- Realtime data & storage
- Statistics graph, trending
- Data Analytics (Optional)



Support Solutions

- On-Call Troubleshooting & Analysis
- Site based support
- Customized Reports
- Annual maintenance solutions
- AI Chat-Bot Support (optional)