





BATTERY HEALTH MONITORING SYSTEM

LEADACID 12V

HOSPITAL

INTRODUCTION

Sosaley Technologies Private Limited specializes in developing indigenous Battery Health Monitoring systems for lithium-ion, lead-acid, and Ni-cad batteries. Sosaley's BHMS helps its customers by improving their business efficiency, reducing operating costs, and optimizing battery performance. This results in increasing their business productivity. Our R&D has been meticulously working for more than a decade to provide at par product solution. We are ready to embrace any new challenges in the field of BHMS.

INTRODUCTION - CLIENT

This leading healthcare network, with 33 hospitals across 17 cities and over 9,500 operational beds, delivers high-quality, affordable care to Indian and international patients. Its experienced medical team, skilled nursing staff, and paramedical experts uphold clinical excellence and ethical practices. With a patient-first approach, it fosters a compassionate environment, ensuring exceptional care and satisfaction. Renowned for professionalism and confidentiality, it has gained trust globally, attracting patients from the Middle East, Africa, and Southeast Asia.





PROBLEM STATEMENT

Frequent Power Interruptions:

Despite having backup systems, the hospital faced issues with power disruptions in critical areas like operation theaters and essential equipment.

Unable to Predict Battery

Failures: The hospital's existing systems lacked the ability to predict battery failures before they occurred, leading to sudden outages.

Limited Monitoring: The hospital's battery backup systems were not being continuously monitored, making it difficult to ensure their reliability during emergencies.

ROOT CAUSE



No Real-time Monitoring

The hospital's existing setup did not offer real-time tracking of key battery parameters, making it impossible to detect potential failures early.



Reactive Maintenance Approach

Without predictive insights, the hospital was only addressing battery issues after failures occurred, which compromised operational continuity.



Lack of Predictive Alerts

The system lacked proactive alert mechanisms to warn the hospital's maintenance teams before batteries reached critical failure points.

SOLUTION

Real-time Monitoring: The BHMS continuously monitored critical battery parameters such as current, voltage, and temperature, providing live insights into battery health.

Threshold-based Alerts: The system was programmed to send immediate alerts if any parameters crossed their safe limits, allowing the hospital staff to take preemptive action.



Predictive Maintenance: BHMS utilized predictive analytics to forecast potential battery failures, enabling the hospital to conduct timely maintenance and avoid unexpected outages.

Data-driven Decision Making: The system generated detailed reports, helping the hospital's maintenance team make informed decisions about battery replacement and repairs.





OUTCOME



Uninterrupted Power Supply: By ensuring the continuous health of backup batteries, the hospital achieved an uninterrupted power supply in critical areas, like operation theaters, ICU equipment, etc.



Early Failure Detection: The predictive capabilities of BHMS allowed the hospital to identify and address potential battery failures before they caused disruptions.



Improved Reliability: With real-time monitoring and alerts, the hospital significantly improved the reliability of its power backup system, ensuring patient safety during surgeries and treatments.

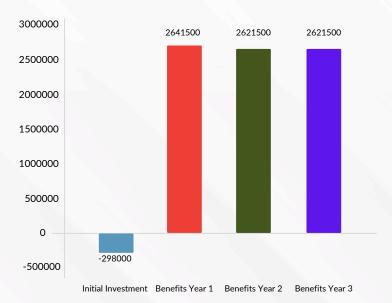


Cost-effective Maintenance: The hospital was able to reduce unplanned downtime and optimize battery replacements, minimizing operational costs while enhancing overall system reliability.

TCO BENEFITS

- Lower Maintenance Costs: 15-20% reduction in maintenance expenses
- Reduced Downtime: Up to 50% reduction in unexpected outages
- Extended Battery Life 20-30% increase in battery lifespan
- Energy Savings 10-15% reduction in energy consumption
- Improved Safety: BHMS can identify potential hazards before they escalate

TCO OF OUR BHMS



* Representative TCO of our BHMS for a large hospital