

WIRELESS BATTERY MONITORING SYSTEM

WE MAKE EARTH SMILE

VAJRA IoT Pvt Ltd

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DESCRIPTION

Vajra's – Wireless Battery Monitoring System (WBMS) is a wireless battery health monitoring product which facilitates proactive and preventive maintenance of batteries.

This BMS system gives out the parameters like string Voltage, string Current, Battery block voltage, Ambient Temperature parameters and other battery-oriented parameters like the State of Charge (SOC), Depth of Discharge (DOD) etc.

The string current is monitored using Split core hall effect transducer by routing the negative cable of the battery bank via this CT. The CT can be rated 100-600 Amps (depending on the Battery bank capacity and Vajra can implement this solution for any available CT capacities in the market) and can provide good accuracy of the current supplied to the load or the charging current by the Inverter.

Apart from the above parameters, the system is capable of reading battery cell voltage at 2V/12 V and ambient

temperature near the battery. It can also be interfaced to master device via RS485 (Modbus RTU)

FEATURES

- Suitable for Robust and secure low power wireless applications
- Identify a faulty battery at 2V/12v cell level in a battery bank.
- State of Charge/ Depth of Discharge display.
- Works with Lead Acid Batteries up to any AH capacity.
- Temperature Sensor for ambient temperature measurement.
- Records the charge and discharge cycles.
- The monitoring system also captures battery bank voltage, string current and direction of string current.
- Parameters computed are a state of charge, depth of discharge, ampere-hours in and out, charge-discharge cycle count, ambient temperature.
- Monitoring battery Voltage & ambient Temperature at 2/12 Volt block-level (refer the architecture).
- WBMS can also support wired communication interface (RS485 over Modbus RTU)
- Web Server based monitoring System front end.
- Instant SMS / Call alerts for critical alerts

