

Case Study – Embedded Systems Telecom Tower Management System

Client : Global Tower Ltd

This system has been very useful GTL. It helps them to get automatic meter reading, reduce manpower and monitor the site remotely for 24x7.

Features

- Remote Monitoring
- Interface with AC/DC energy meter
- Access Control
- Camera Interface
- Alarms alerts
- Battery Bank monitoring
- Diesel generator parameter & fuel monitoring
- Customized GUI with user defined reports

Contd...

Case Study – Embedded Systems

Telecom Tower Management System (Contd...)

RMS Device

RS485 Bus

BHMS

Check the Battery bank voltage , SOC, Charging & Discharging status.

Free Cool Unit
(FCU)

Checks the Humidity, Shelter & Ambient temperature for taking the decision to switch ON Air conditioners or Exhaust fans for saving electrical energy.

Access Control Unit
Security Surveillance

Restricts unauthorized physical access to the shelter with camera image.

Battery Cooler

Increases the life of Battery bank by maintaining the temperature of battery bank room between 25 to 30 degrees.

Theft Alert Device

Sends alert via SMS or Voice Call (IVRS) using GSM network during Feeder Cable cuts, Shelter door opening, Earthing bar theft, Low Fuel level, DG battery theft & High room temperature.

DG Controller

Monitors all DG parameters & controls switching ON/OFF as required using RS485 communication.

Asset
Management

Keeps track of assets using active RFID based tags.