

# Long-Range Status Monitoring System for Industrial Switchgear

## Technology Overview

This technology remotely monitors the switchgear status and environment conditions. The system is capable of gathering moulded case circuit breaker (MCCB) status, digital power meter readings, thermal condition of MCCBs and ambient environmental conditions of the switchgear items and communicating these data wirelessly over a long distance. The long-range status monitoring system includes both hardware and software. The hardware devices with respective firmware, monitor the circuit breaker status in a hierarchical structure. The software provides interfaces for monitoring, and alerting the users.

## Features & Specifications

This solution comprises of a local sensor device, a station device and a web application with cloud server module. The features of this technology are:

- Wireless circuit breaker status monitoring.
- Hierarchical structure to organise the circuit breaker status monitor from the hardware level to software level to reduce the cost and improve the efficiency.
- Plug and play solution to fit for existing circuit breaker, compatible with switchgears from major manufacturers.
- Long range low-frequency communication.



## Customer Benefits

- Wireless and long-range communication eliminate need for massive long cabling
- Real-time status monitoring of MCCBs and digital power meters from multiple brands
- Switchgear ambient environment monitoring and abnormality alerts
- Convenient plug and play system with scalability

## Potential Applications

Cost efficient add-on solution to monitor existing MCCBs, power meters and its ambient environment in industrial, commercial buildings and factories.