

Energy Management Solution

An energy management system (EMS) is a framework for energy consumers, including industrial, commercial and public sector organizations, to manage their energy use. It helps companies identify opportunities to adopt and improve energy-saving technologies, including those that do not necessarily require high capital investment. In most cases, the successful implementation of an EMS requires specialized expertise and staff training.

Objective

Monitoring energy consumption.
Minimize unnecessary power consumption.
Formulation of energy strategy and energy conservation plan.
Carry out modifications, retrofitting, or replacement of existing plant/machinery to save energy.

Challenges

Realtime Energy monitoring is required. As a large plant area, required huge time and resource investment to just capture the reading of the meter. As it's a human involved process, may be an error in the reading meters. Replace & retrofit new smart energy meters. Connectivity of the energy meters

Result

Real-time and factual data.
Improved power supply distribution
Accurate and faster decision-making.
Better capacity utilization.



EMS

Solution

Intellistride proposed the use of LAN, WIFI, routers, smart protocol convertors, smart energy meters, Edge gateway & EMS platform (on-premises & cloud based) for remote monitoring of energy data. To get the energy meters data IT & OT communication will be done with the help of LAN, WIFI, smart convertors & smart meters.

Energy meters need to be replaced with smart energy meters. A converter will be required to convert RTU to TCP. All meter data will be sent to edge Software and then the database. with the help of a dashboard, data can be visualized on-premises and cloud software.

Intellistride deployed the following sensors hardware and software components to implement the

Hardware/Software Components

- LAN/WIFI network
- Smart protocol Converter
- Smart Energy meter
- Edge platform
- IOT application