

Customer

US based Smart Metering Company

Overview

To design Smart Metering Solution over Power Line Communication (PLC) Technology with post-paid and pre-paid metering modes and cloud based data acquisition.

Requirements

1. To provide Smart Metering Solution over Power Line Communication (PLC) Technology
2. 4G/ GPRS / Ethernet based Gateway
3. Prepaid and Postpaid Metering Mode
4. Cloud based Meter Data Acquisition System

Solution



Energy Meter

- Class 1 Based Metering Engine
- SMPS based power supply design
- Integrated connect / disconnect switch
- Isolated RS232 Port and optical port.
- Plug-in-Play AMI Solution

Gateway (DCU)

- PLCC & GPRS / Ethernet Gateway
- PLCC mesh network topology
- Battery backup and outage management
- Intelligent Edge Computing device



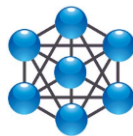
MS Azure Based Cloud SW

- Data Acquisition
- Data Aggregation
- Data Visualization
- Outage management



Network Enablement

- PLC & GPRS Connectivity
- Protocol Integration
- Communication Security
- NW Authentication



Mobile App

- Consumer Information System (CIS)
- Energy Usage Information
- Historical Consumption Data
- Graph for Consumption Pattern



Benefits

- Inbuilt Latch relay for load limiting feature for remote connection & disconnection
- Tamper and events detection and reporting to HES
- On-demand reading for missing interval data.
- Generate data useful for energy audits and surveys.
- Broadcast of event messages and SMS to the customers for marketing and promotion.
- Provide remote firmware upgrades (FOTA)
- Cloud based solution based over Microsoft Azure to support Peak Load Management (PLM) and demand response features