IOT Based Electricity Energy Meter Reading

The Existing domestic Energy meter reading systems universally exist many problems, such as difficulty in construction, too narrow bandwidth, poor real time, not two way communications quickly etc. To solve above problems, this paper uses the wireless technology for Automatic Meter Reading system. A proposed method provides the communication between the Electricity Board section and the consumer section using Internet of things (IOT) for transmitting the customer’s electricity consumption and bill information that is calculated using microcontroller. The power fluctuations are monitored using the voltage sensor and current sensor is fed to the microcontroller which indicates it to the Electricity Board. Depending on the power generation, the house hold devices are controlled automatically. From Electricity Board section the information regarding the bill amount and payment are communicated to the consumer via Global System for Mobile communication. The power and billing information is continuously transmitted by the use of Internet of Things and monitored by the Electricity Board section.

REAL TIME CLOCK

DS1307

GSM

RELAY

WIFI ESP 8266

VOLTAGE SENSOR

CURRENT SENSOR

POWER SUPPLY

LCD

Microcontroller