Energy Meter Monitoring Over IOT

Abstract:-

Monitoring and keeping tracking of your electricity consumption for verification is a tedious task today since you need to go to meter reading room and take down readings. Well it is important to know if you are Charged accordingly so the need is quite certain.

Well we automate the system by allowing users to monitor energy meter readings over the internet. Our proposed system uses energy meter with microcontroller system to monitor energy usage using a meter.

The meter is used to monitor units consumed and transmit the units as well as cost charged over the internet using Wi-Fi connection. This allows user to easily check the energy usage along with the cost charged online using a simple web application. Thus the energy meter monitoring system allows user to effectively monitor electricity meter readings and check the billing online with ease.

Block Diagram:
Hardware Specifications
1. Energy Meter
2. Lamp
3. ATmega328P AVR MC - Buy ATmega328P Online
4. ESP8266 Wifi Module – Buy Wifi Module Online
5. LCD’s – Buy LCD Online
6. Resistors – Buy Resistors Online
7. Capacitors – Buy Capacitors Online
8. Transistors – Buy Transistors Online
9. Cables & Connectors – Buy Cables & Connectors Online
10. Diodes – Buy Diodes Online
11. PCB – Buy PCB & Breadboards Online
12. LED’s – Buy LED Online
13. Transformer/Adapter – Buy Transformers & Adapters Online
14. Push Button – Buy Buttons & Switches Online

Software Specifications:
- Arduino Compiler
- MC Programming Language: C
- IOTGecko