CLOUD BASED ENERGY METER

**Abstract:**

Efficient energy utilization plays a very vital role for the development of smart grid in power system. So, proper monitoring and controlling of energy consumption is a chief priority of the smart grid. The existing energy meter system has many problems associated to it. To solve this problem, a smart energy meter is proposed based on Internet of Things (loT). The proposed smart energy meter controls and calculates the energy consumption using ESP 8266-12E, a Wi-Fi module and uploads it to the cloud from where the consumer or producer can view the reading from anywhere. Therefore, energy analyzation by the consumer becomes much easier and controllable. This system also helps in detecting power theft when we use this in entire hub. Thus, this smart meter helps in home automation using IoT and enabling wireless communication which is a great step towards Digital India. Also we have a predictive analysis using machine learning to predict the future usage and bill amount of a customer by analyse the bill history

Block Diagram

