IoT Based Prepaid/ Post-paid Energy Metering System

Abstract
The currently existing domestic energy meters in India had some swift technological advancements when the static meters were introduced which could calculate the power consumed without any rotary motion by using a discrete IC. This was a remarkable step in the field of electronic metering which reduced a few blemishes of the previously used dynamic meters. Despite this improvement, the procedure carried out to read the energy meters and get the billing details is done manually by an authorized member of the board at the beginning of every month. The metering we propose here automatically senses the used energy, records these readings and stores it in a cloud network where it can be monitored continuously in real time constraints. A system which will provide duteous billing info and monthly usage statistics to the user through a web server will be more suitable in the information age we are today. In addition to this, the system is made flexible by giving the user an option to renovate his conventional post-paid meter to work as a prepaid one. IOT is the technology used to make this interconnected system work in a smart and resourceful way. The system not only solves the problem of manual meter reading but also provide additional features such as power disconnection due to outstanding dues, power reconnection after making the necessary payments, power cut alert, tampering alert etc. instantly.

References

- Rozita Teymourzadeh, S Mahmud, Ivan and Ahmed J. A. Abueida, "RFID based prepaid power meter", IEEE 2013

Index Terms

Computer Science
Information System
Keywords
Cloud Network  Prepaid  Post-paid  Iot  Tampering Alert  Power Alert.