Abstract

Lack of resources established in the present world is initiating everyone towards energy efficient technologies. Among all these resources, power is one which needs to be monitored and controlled as per the need since electricity consumption is increasing day-by-day. We live in a world where almost everything runs on electricity. 67% of their sources used to produce electricity are non-renewable sources of energy. Power is the soul of the world which is related to the electricity and “electricity” is the word which now rules the world. So, proper utilization of these resources is of immense important to us. Though many technological innovations are taking place in this world, existing electricity consumption billing process seems in India to be very old fashioned and does not meet the latest technology available. In this paper we present a newly designed digital meter based on a very cheap distributed components like microcontroller architecture and current sensors.

The power lines which already exist and connect every household in a particular area as it does not require any new installation or erection for establishment of communication channels. So
the system doesn’t require placing other cables and along with this we are using WIFI to communicate with the servers and users. By measuring current and voltage, we can analyze energy consumption, make the world smarter place and make better decisions using Internet of Things.

References

1. Lun Cuifen, Zhang Xiaoqin, Li Yanping, Liuce “The Electric Meter Reading System Based on Wireless Micro Computer” - 2010 (IEEE Paper)

Index Terms

Computer Science          Circuits and Systems

Keywords

Internet of things (IOT), Smart electric meter reading, Microcontroller, Current sensors