

**SMT. KASHIBAI NVALE COLLEGE OF ENGINEERING, PUNE 41**  
**DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING**  
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**ABSTRACT**

**Title: PREPAID ENERGY METER AND THEFT DETECTION**

The Internet of Things (IOT) is inter communication of embedded devices using networking technologies. The IOT will be one of the important trends in future, can affect the networking, business and communication. In this paper, proposing a IOT based prepaid energy meter. Most of the energy meters are designed to bill as per the units of energy consumed. These meters need to be manually read by people in order to provide monthly/quarterly bills. We here propose a IOT based smart electricity meter. The system is designed to allow amount of energy to be used as long as the account has balance pending. It also allows the operator to recharge the user account using IOT. The system first accepts account recharge and allows to use only limited units of energy as per recharge and then cuts off the supply. The prepaid electricity billing meter could be widely used to provide a new more customized electricity billing system, where users may recharge when they intend to use that facility. It also consists of a ESP8266 module that allows the operator to recharge the meter remotely using email message service. This puts forward an innovative electricity billing and “use as needed” electricity usage scheme. It also eliminates the need for manual electricity meter reading tasks. This meter are digital meter with short circuit protection, Over voltage protection, Anti-Theft detection. Smart energy meter with reading indication has been developed by using GSM. Which is more useful to consumer for billing and maintaining less bill payment and it decreases the human needs for paying and other issues related to billing. We can extend it for industrial purposes also by interfacing three phase meters but the circuit have to modify for getting proper voltage to the controller.

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