

Rechargeable and Sensible Smart Energy Meter

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Abstract: *This study has specifically focused to develop a Rechargeable and sensible Smart Metering System which would be able to address some of the challenges currently available in the regular digital automated metering system in Eurasia. Smart Metering with its unique performance with the Internet of Things (IoT) tend to be an efficient system for electricity management, se-cure against the intervention by third parties, and reliable for tracking and real-time remote monitoring. Hence, this project work is accomplished by analyzing available functions and journals on the existing design of Smart Metering and discussed on further preferable application. In the currently working system, electricity meter reading for electricity usage and billing is done by human workers from home to home and building to buildings. The purpose of this project is to develop a Smart Electricity meter using ESP8266-12E & Atmega328. This can reduce human errors and helps to retrieve the real time meter value via IOT and send it to customer's mobile phone through IOT. This also al- lows electricity board to modify the variable package price in specific duration. The administrator can analyse the customer's power consumption data and generate the report from the data online. The prototype will be able to introduce the billing system to the customers, get the power consumption data from smart meter, keep the data in centralized database and generate the report.*

Keywords: ESP826612E, ATmega328, Energy Meter, Display

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