

# Investigation of Monitoring Electrical Consumption on Load Using IoT

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## **ABSTRACT**

Nowadays, usage of electrical energy is overly and uncontrolled used by consumer without any realizing the total usage or actual usage of electrical appliances. Therefore, energy waste is become increase year by year due to increasing of demands such as building, houses, factory and any other usage that are consumes any electrical energy. Besides, electrical energy consumption and demand are increased dramatically. This is because electrical appliances are increasing by times in any building or premises, the energy or load is being overly used without any control or awareness from consumers. The problem that needs to face is the consumption of electrical appliance. This is happened because of growth of technology. The objective for this project is to investigate the concept of energy monitoring system with the fundamental of the concept it could help to reduce the amount of consumption energy. Second, to investigate efficiency of electrical appliances by observing power factor from that the consumer can detect with appliance is use high currents. Next, to create a device that can reduce energy usage by measure and observing how many energies that the appliance will be consumed.

## **KEYWORDS**

Monitoring system; Energy efficient; Electrical consumption; Internet of Things (IoT)

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