# Unattained Tamper Proof Digital Energy Meter Based on IOT

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**Abstract:** *The Unachievable Energy metre is designed to prevent tampering with readings. The concept is to employ a wireless monitoring gadget connected to a smartphone to display the amount of energy consumed. The IoT-based communication system may be linked to a digital energy meter using an MCU processor. The digital energy metre, which is made up of digital components, must be installed above the electric pole, out of reach of the energy consumer. Energy consumption data may be tracked using a smartphone, removing the need for an energy meter to be installed on the energy user's campus and the risk of metre manipulation. Energy customers may view their energy use data using IOT technology on their mobile phone instead of the main unit of the energy meter being located above the electric pole itself, avoiding meter manipulation because the main unit is not accessible to them. We only required one electronic energy metre to demonstrate the idea in action. This energy meter, which is mounted on the pole, must be updated in order for data on energy usage to be transmitted via Wi-Fi module. The metre generates and transmits proportionate pulses based on energy consumption. To improve energy meter accuracy, it is designed to generate 1600 pulses per unit consumption, with the length between the two pulses varying depending on the load. The energy meter's main unit may be installed directly on the electric pole, eliminating metre tampering because the main unit is not accessible to energy consumers; instead, data from the meter's pulse output is processed and transmitted by the Arduino MCU.*

**Keywords:** MCU processor, Wi-Fi module, IOT technology, Arduino

## REFERENCES

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