Abstract

Nowadays we facing issues of unmeasured use of energy and facing wastage or improper use of natural resources. People are misusing power inputted into each one's house, leading to more transferring of power and more use of renewable as well as non-renewable resources. The uncontrolled use of non-renewable resources is leading to climate changes and threats of natural disasters across the globe.

Therefore, to control the overconsumption of power, a smart grid infrastructure has been designed to tackle the issue of overuse. The device is capable of calculating the input power rate to each house thereby setting the total usage of the inputted power to whole i.e. the total inputted power will be equal to total used power. There will be no overloading or underloading.

Features

The device uses smart cloud computing technology and deep learning networks to get updates from sensor regarding the input power directed to each house and the total power that is being consumed by the household. Th error maximum can be set to zero to ensure total usage of energy and suggestions of equipment to be connected to ensure total usage of power.

Functionalities

- The sensor updates can be updated into any handheld device or mobile phone cloud storage to keep it for future references as well as assess it from anywhere possible.

- It can trigger warning alarms when over power is consumed as well as when underloading occurs it can update a warning message in its handheld device.

- It can keep regular updates of energy consumed every month and give review about the energy usage whether it is excellent, healthy or unhealthy.

- It can also give suggestions on what to connect to maintain the total usage of power or what to remove when overloading of power occurs.