

Automatic Street Light Using IR Sensor

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Abstract: *The natural resources used for powering purposes are limited resources and getting diminished day by day as the demand for it is rising. In developing countries, Amount of generated electrical energy is unable to keep up with the demand, and also there is scarcity of raw materials for producing the energy. In countries like India, 1/5th of energy consumption is through street lighting. The conventional street lights are still designed according to old standards of reliability. Because of this, large amount of energy is wasted and it puts a lot of stress on the natural resources used for generating electricity. Alternative sources are now explored to prepare for the future dearth of traditional energy sources. The Smart street light provides a solution for energy saving which is achieved by sensing an approaching vehicle using the IR sensors and then switching ON a block of street lights ahead of the vehicle. A well designed energy efficient street light system should permit traffic and pedestrian to travel at night with great visibility in safety and comfort while reducing energy consumption and cost. The main aim of our project is to make use of the energy generated as the result of movement of vehicles on road to control the street lighting and thereby increasing their efficiency and also automating their process.*

Keywords: Piezoelectricity, Energy harvesting and storage, Automation, Innovative energy source.

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