

# Smart Street Light System

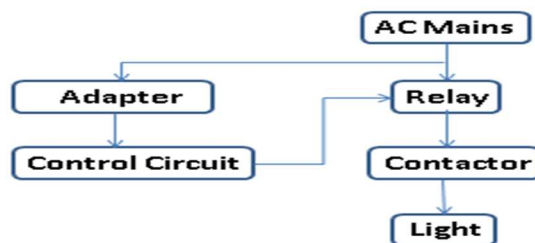
**Name of the Project :** Design and Development of an Electronic System for Automatic Control of Street Lights.

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## **Project Objectives:**

This project aims to build a standalone electronic system that can be interfaced with the existing streetlights in order to have an automatic control of street lights to achieve energy efficiency and reduce the cost. The primary objective of this project is to eliminate the inefficient and unreliable man power used in turning ON and OFF of the street lights. This project proposes to build an electronic system that controls the street lights automatically depending on the environmental conditions. This minimises the power consumption and maximises the power reliability. The control device installed in each of the street light network will take an input from the local/surrounding environment and operate the street lights optimally. This electronic device can be interfaced with the utility power AC mains or to the solar power panels depending on the availability will decide if the lights have to be turned ON or OFF. The combination of light sensors, relay and the contactor would facilitate switching the street lights. The circuit receives the power from the AC mains/solar power panels, after which the voltage is converted to a suitable DC level with adapter. The output of the controller is fed to a driver to drive the relay that turns the street light on or off depending on the environmental conditions. This proposed design has a great potential to hit the commercial market as a product in a developing country like ours.



Proposed Electronic System

## **Key Deliverables/Outcomes:**

- An electronic standalone system for automatic control of streetlights.
- To save energy and hence reduce the electricity bill by optimum utilization of the electricity.
- To reduce man power requirement in turning the lights ON and OFF every day.
- To improve the overall efficiency and reliability of the system of streetlights.

**Estimated Cost:** Rs. 1.50 Lakhs