

## **SMART STREET LIGHT SYSTEM USING MICROCONTROLLER**

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A large amount of electricity of many towns and cities is being expended in the all night street lighting systems. Generally, street lights are switched on for whole night and during the day, they are switched off. But during the night time, street lights are not necessary if there is no traffic. Saving of this energy is very important factor these days as energy resources are getting reduced day by day. Alternatives for natural resources are very less and our next generations may face lot of problems because of lack of these natural resources. With Automatic Street Light Control(ASLC), the manual operation of the lighting system is completely eliminated. ASLC aims at the design and implementation of an automatic system reduce energy consumption of streets public lighting system up to the maximum possible extent. Thus, this way of dynamically changing intensity helps in saving a lot of energy. A programmable microcontroller is engaged to provide different duty cycle for different intensities at different density conditions. The proposed system consists of microcontroller, LDR, PIR (Passive Infrared) sensor and RTC (Real Time Clock). This system controls the street lights using light dependent resistor and PIR sensor.