

PROJECT REPORT ON “LED BASED STREET LIGHT FOR REMOTE AREAS USING SOLAR POWER”

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ABSTRACT

LED based street light system is designed for outdoor application in un-electrified remote rural areas. This system is an ideal application for campus and village street lighting. The system is provided with battery storage backup sufficient to glow the LEDs for 8-9 hours daily. The project is about to develop and fabricate the circuit that can charge the lead acid battery during day time by using solar energy as the source. Charging unit has been used to charge the battery to monitor the condition of charging. During charging condition, green LED will turn on and red LED will turn on when fully charged. The driver circuit is used to drive the LEDs. The LEDs will be controlled by microcontroller with RTC. According to time set in RTC, the microcontroller will send high or low signal to relay circuit there by turning ON or OFF the LEDs.