

ABSTRACT

Solar powered public street lighting is an inexpensive alternative and cost-effective to be used as a power source of lighting for energy sources and its also unlimited and free because nature provides the energy, so called solar energy. Public street lighting (PSL). use a solar based hi-power LED types which are very bright, energy efficient and durable using solar panels / solar cell as the source and its function is to receive the light of the sun which is then converted into electricity. This paper discusses the data communications solar based lightings. For planning puposes it requires a solar panel components that include solar modules, battery charger, battery, current sensor, GPRS module, controller, and LED lights. The usage of solar based power lighting is highly more efficient when compared to the power usage sourced from PLN. Street lighting using solar power (solar cell) can reduce the consumption of electricity from PLN.

Keywords: Solar Cells, Battery Charger, Controller, Current Sensor, GPRS module, lamp street lighting.