

TWO AXIS SUN TRACKING SYSTEM IN SOLAR CELL POWER PLANT

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ABSTRACT

Solar energy is one of the alternative sources of energy that can be harnessed as a source of renewable energy. This untapped energy resources optimally, due to the influence of rotation and revolution of the Earth.

Two axis sun tracking system is a new innovation that is designed specifically for the optimization of the use of solar panels as generating electrical energy.

The design of the hardware consists of a solar cell as a means of conversion of sunlight into electric power, data processing which is operated with the arduino Nano, sensors, voltage sensors, LDR relay driver, and the LCD Viewer.

By using a tracking system of the Sun it can add to the effectiveness of the solar cell, because the energy of the largest received by the solar cells is the direction of the solar radiation that is perpendicular to the plane of the solar cells.

Keywords: *Solar cells, ArduinoNano, Detector Light*