

IMPLEMENTATION OF LIGHT SENSOR (PHOTOVOLTAIC CELL) MEASUREMENT

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ABSTRACT

Photovoltaic cells were introduced since the late 1840's and now it is widely used all around the world. Many researches have been done to mature the usage of photovoltaic cell. I've decided to continue the work of many and to build a photovoltaic cell measurement. My project is basically to measure the intensity of light that falls on the photovoltaic cell and displaying the results.

As the title implies, Implementation of Light Sensor (Photovoltaic Cell) measurement, I have to build two parts which is the emission of light source and a measurement device that is able to measure the output Voltage, Current and Power. These measured outputs will then be displayed on the LCD display. The output of the intensity of light which is the analog Voltage is converted to digital signal. It is processed and converted back to analog to be displayed in the LCD display. The output will also be recorded down in the computer which will then plot a graph on its own.

As for the output of the project, measured values of the voltage 0-12V, current and power are based on the intensity of light which is emitted to the photovoltaic cell from the analog form to digital form. By using this measurement device, people will be able to know the Voltage, Current and Power being supplied from the photovoltaic cell.