

## ABSTRACT

This paper proposes the monitoring grid connected photovoltaic system with online mode. The objective is to be measured and store actually electrical power which produced from photovoltaic (PV) system such as electrical power, power factor. The monitoring of PV system can be shown voltage, current signal. Using likes movable hand tool.

The experimental result found that it can be measured and analyze voltage, current signal, electrical power and include useful variable which using for another experimental result. The experiment is done completely by many loads such as desk fan, fluorescent lamp, sodium lamp, incandescent lamp respectively. The resulting has been calibrated by standard tools such as ammeter volt meter, watt meter found that the resulting is reliability. The monitoring system has tested low voltage grid connected photovoltaic system. The resulting is satisfied.

Finally, the experimental result shows that the monitoring of electrical energy production can be used truly and it will be developing to advance usage.

**Keywords:** Monitoring, Energy production, PV system