### ONLINE PHOTOVOLTAIC (PV) SOLAR PANEL MONITORING SYSTEM

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#### ABSTRACT

In order to analyze the performance of PV systems, we have developed a real-time monitoring system using communication gateway that can be remotely accessible from anywhere in the world using an internet portal. The development of the system is able to monitor, supervision and control of PV systems installed over wide area and at the same it can collect current data which can be stored in the database or server for future analysis. Based on the analysis of several remote monitoring technology projects that exist nowadays, this project aimed to design, construct and integrate with others to build a comprehensive system that can be applied whether for household application or large scale Photovoltaic (PV) plant. This project is developed to innovate the green technology mainly in solar energy to be more efficient and reliable source of future energy used by the household users and an industry. By doing so, the monitoring system needs to be flexible and accessible anywhere to make sure early detection of any malfunction can be alerted.

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