Development of PV Module Hotspot Detector

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Abstract:

The aim of this paper is to develop an analyzer for detecting and evaluating hotspot in problem in a photovoltaic (PV) module. There are many causes that can lead to the hotspot in PV modules such as shading effect, impurities present on the module surface and many more. The proposed system will capture the thermal images of the PV module and analyze each region in the image. The system will detect the hotspot regions and evaluate the severity level of the hotspots. Though the experiment, the proposed system could produce a reliable result compared to the conventional approach

Keywords: Photovoltaic Module; Solar Hotspot; Infrared Thermal Camera.

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