



THERMOGRAPHY INSPECTION SERVICES FOR SOLAR PV PLANTS

Ensure uptime at all levels, Early detection of short circuits,
Improvement of Energy Efficiency and Establishment of Green Environment



SACHU TECHNOLOGIES

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SACHU TECHNOLOGIES offering Infrared Thermographic services prides themselves in the world class Predictive & Preventive maintenance in solar Power Plants utilizing latest contemporary branded Infrared Thermal imaging Cameras which provides high resolution Thermographic images to ensure the best possible techniques used in the industry. By scheduling repairs before a failure occurs profitability, productivity, and work place safety are all increased. Utilizing an advanced fully radiometric infrared camera independent infrared testing services are provided by one and only by Sachu technologies in India for Solar Power plants. Thermographic inspection of photovoltaic systems allows the fast localization of potential defects at the cell and module level as well as the detection of possible Electrical interconnection problems. The inspections are carried out under normal operating conditions and do not require a system shut down. Inspections with a thermal imaging camera - starting with the quality control in the installation phase, followed by regular checkups - facilitate complete and simple system condition monitoring. This will help to maintain the solar panels' functionality and to extend their lifetime. Using thermal imaging cameras for solar panel inspections will therefore drastically improve the operating company's return on investment The purpose of Thermography is the detection of hot spots in the modules which sooner or later can turn into defects as well as checking if the module is heated up evenly. The results allow you to draw conclusions about the quality of the PV module.

The use of thermal imaging cameras for solar panel evaluation offers several advantages. Anomalies can clearly be seen on a crisp thermal image and - unlike most other methods - thermal cameras can be used to scan installed solar panels during normal operation. Finally, thermal cameras also allow to scan large areas within a short time frame. This method makes it possible to detect the defects in the solar plant

Detected Malfunctions in Electric components in from KW to MW Solar Power plant

Solar Module cells in PV Array, By pass diodes, Combiner boxes, DC Isolators, DCDB Boxes, ACDB Boxes, Inverter connections, Surge arrestors and sockets, Mechanical defects In active cell parts, Over heated welding spots of hot spots, 11 KV Breakers, Transformers, HT yard etc.,

Advantages:

- Safety increases, maximize maintenance efforts
- Avoid Losses, accidents, serious hotspots leads loss of power Generation
- Increased Power Generation after Infrared Thermography Assessment
- Reduced unexpected outage costs. Extend equipment life
- Prevent Loss production Increased production in industry.
- Profit increase.
- Maintain 100% up time (or) availability power Generation
- Green Environment Establishment

