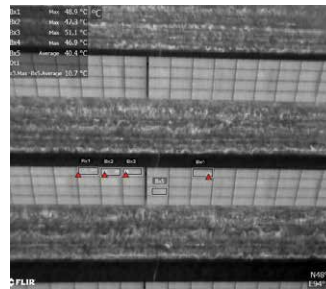


SMA AERIAL THERMOGRAPHY

Keeping Your PV Plant Profitability Soaring



Proactive inspection and monitoring are crucial in determining the health of your plant and detecting any degradation or failures that impact revenue generation. Issues such as cell or diode failures, fuse failures, wiring failures, shading, and module degradation can manifest and accumulate gradually. This presents a challenge due to the sheer quantity of modules and connection points on a PV plant and require substantial time investment to thoroughly investigate from the ground. SMA has the solution.



SMA's Aerial Thermography service provides a cost efficient and highly effective way to identify faults in the PV-field of a plant. Your ROI is directly improved because SMA provides immediate actionable insights on faults without painstaking investigation such as IV curve tracing or hand-held thermography.

SMA Advantages:

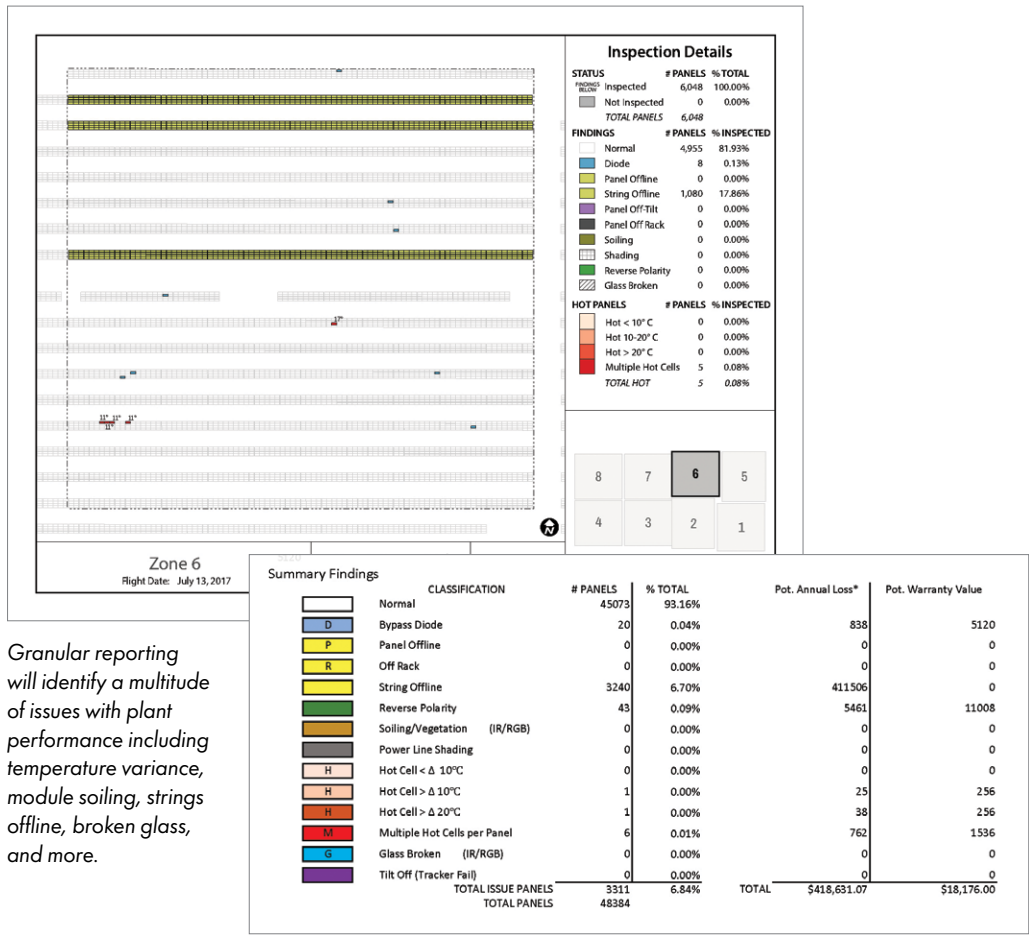
- » FAA-licensed pilots, knowledgeable on all FAA regulations and processes
- » ASNT-certified thermographers ensuring proper imaging and result validation
- » Reports per ASNT SNT-TC-1A (2011) standards
- » Proprietary systems for image processing and analysis for optimal results
- » GIS located plant layout with module level history tracking
- » Highest resolution equipment using radiometric data
- » Latest flight management systems for accurate pathing and flight angle



WHAT'S UNIQUE ABOUT AERIAL THERMOGRAPHY FROM SMA?

SMA aerial thermography is so precise it can detect issues down to the cell level, significantly decreasing the time spent identifying and diagnosing problems. In fact, SMA data analysis of sites has shown that as much as 6% of modules have a performance issue while 1.6% of them have been completely offline at any given time. Aerial thermography by our team of FAA-certified pilots and ASNT-certified thermographers can quickly address these problems, keeping your profitability on track.

SMA's detailed reporting output is generated using cutting-edge, proprietary image processing and analysis systems.



Granular reporting will identify a multitude of issues with plant performance including temperature variance, module soiling, strings offline, broken glass, and more.

Full analysis of potential revenue loss gives systems owners an unparalleled view of their PV investment performance to evaluate corrective actions.

SMA breaks down issues by categories and reports associated potential lost revenue. The following are some of the categories of issues reported: diode failures, panel/string offline, reverse polarity, soiling, vegetation coverage, shading, warm/hot cells with temperature differentials, modules with cell temperature anomalies, and cracked modules.

Don't risk your plant's revenue. Contact SMA today to learn more about aerial thermography and how to keep your PV investment's profitability soaring sky high.