



Improve
Reliability



Reduce
Costs



Improve
Safety

QUICKLY LOCATE PARTIAL DISCHARGE (PD) WITH ACOUSTIC IMAGING

INCREASE RELIABILITY OF TRANSMISSION/ DISTRIBUTION SYSTEMS

THE CUSTOMER'S CHALLENGE

For many years utility companies have been performing partial discharge (PD) measurements on high-voltage electric equipment. PD is an indicator of insulation deterioration that can lead to equipment failures or even worse a catastrophic incident. With traditional ultrasonic solutions, the systems can be large and cumbersome and the inspection reports usually need to be analyzed by an acoustic engineer. Given this, inspections can become less frequent, leaving equipment like motors, generators, switchgear and transformers vulnerable to PD related issues.

HIGHLIGHTED SOLUTION

Acoustic imaging, or the ability to see ultrasonic sound, has emerged as an effective method utility organizations use to locate the existence of partial discharge (PD). It enables professionals to conduct more frequent predictive maintenance routines, helping provide a crucial first warning of impending electrical failure that could lead to downtime of critical systems. The FLIR Si124 industrial acoustic imaging camera senses, displays and records sound waves producing a precise acoustic image. The acoustic image is overlaid, in real time, onto a digital camera image all with an easy-to-use, ergonomic, one-handed camera solution weighing a little more than 2 pounds (980 grams).

THE RESULTS

With the FLIR Si124, professionals can safely detect problems from up to 100 meters away and analyze discharge patterns. The camera classifies three partial discharge types, including surface discharge, floating discharge, and discharge into air. Knowing the type and severity of the discharge allows users to prioritize repairs.

Image captures are quickly uploaded over Wi-Fi to the FLIR Acoustic Camera Viewer cloud service for the user to perform further in-depth analysis of the system generated PD patterns. Users can then create reports and easily share them with colleagues.

The Si124 enables customers to perform more frequent inspections, helping utilities keep the power flowing.

For more information about the FLIR Si124 or to schedule a product demonstration visit: www.FLIR.com/si124

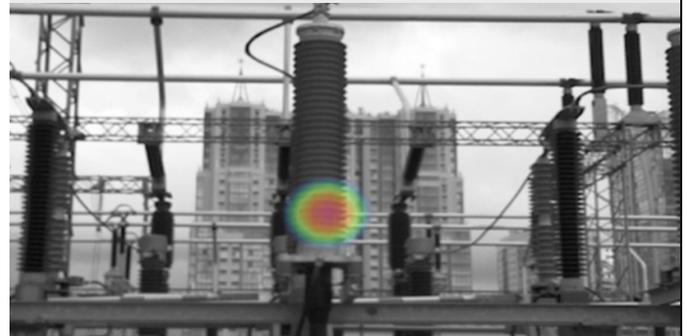
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www.flir.com
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CORPORATE HEADQUARTERS
FLIR SYSTEMS, Inc.
27700 SW Parkway Ave.
Wilsonville, OR 97070
PH: +1 877.773.3547

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The Si124 helps speed up inspections by scanning large areas from a safe distance



Quickly and safely locate Partial Discharge within a high-voltage electrical system



System quickly provides PD type classification and PD pattern for further analysis



FLIR Si124™

