Electrical Substation Monitoring

Keeping the lights on and the power distribution grid running are critical to maintaining our modern way of life. Everything depends on the power grid; from our food and water supply, to the factories, networks, security systems, and banking industries that we all rely on every day to keep our world on track. No aspect of our modern societies can function without power.

However, power utility companies are facing increasing pressures. Aging infrastructure and increasing demand for low-cost energy are putting more stress on the power grid, increasing the risks of costly and potentially devastating brownouts and blackouts. At this critical time, utilities need solid solutions to help increase capabilities, maintain reliability, while at the same time, keeping costs under control.

The MoviTHERM Substation Monitoring Solution

In order to meet these industry challenges, MoviTHERM has developed an integrated Substation Monitoring solution. Using a combination of advanced thermal imaging and proven, off-the-shelf components, the MoviTHERM Substation Monitoring system provides all the tools you need to detect problems early -- before they turn into costly and potentially critical substation failures.

FLIR A310f - The eyes of your system

The FLIR A310f is a ruggedized, all-weather version of FLIR’s popular A310 thermal camera. The basic system comes with six (6) A310f cameras, which can be mounted strategically around your yard. Cameras should be located to monitor temperatures and watch for unexpected “hot spots” on critical electrical components. The cameras’ built-in analysis and alarm functions work in tandem with the other system components to alert substation personal when remedial action is required. In addition, one or more of the cameras can be configured to scan for unauthorized intruder entry, increasing the security of your facility.
**MovITHERM MIO-8 - The brain of your system**

The MovITHERM MIO-8 acts as the traffic cop, or the central processing hub of your system. The MIO processes data from the cameras, and sets the digital (relay) and/or analog (4-20mA) outputs to trigger audible alarms, turn on warning lamps, launch auto-dialer alerts, or activate any other type of electrical warning device. The device is easily configured using a browser-based configuration tool. It’s quick to set-up, and a snap to modify the response profile.

**FLIR NVR - Your window into the Invisible**

The FLIR Network Video Recorder (NVR) displays the live video feeds from the FLIR thermal cameras on a video display screen. In addition, the NVR can be configured to display on-screen warnings and alarm indications. If you enable the Video Archiving function, you can save several months of video on-board, for historical review and issue analysis. Add an Internet connection to the NVR, and your monitoring system can be access from anywhere in the world using the FLIR Cloud technology. Log in to check the live view, or review alarms remotely, using a PC, Mac, Android, or Apple iOS device running the free FLIR Cloud app.

**Unlimited Interfacing Potential**

Connect to warning lights, audible alarms, auto-dialers, PLC controllers -- any type of electrical or control device you can imagine. The MovITHERM Substation Monitoring System provides the intelligent sensor capabilities, Built-in Operator Interface/video wall, and data archiving capabilities in a clean, well-organized package.

**Easy to install, and easy to configure, the MovITHERM Substation Monitoring System is your shortest path to a robust, cost-effective, full-featured electrical substation monitoring solution!**