



In today's age, keeping the power distribution grid up and running is essential in maintaining our day-to-day lives. But as renewable energy sources like wind and solar make headlines for their significant progress in cost reduction, traditional power utility companies are facing increased pressure to provide low-cost energy. This, paired with aging infrastructure, is putting additional stress on power generation facilities—which, if critical equipment fails, can ultimately disrupt power supplied to the grid.

Now more than ever, power facilities must implement sound solutions to help identify possible equipment failures, perform preventative maintenance, keep repair and replacement costs under control, ensure that power is supplied to the grid without interruption, and more.

Throughout the years, handheld, portable thermal cameras served as the go-to tool in identifying hot spots and potential failure areas in electrical distribution systems, but they are often used intermittently. However, facilities that implement continuous monitoring of critical equipment and assets—such as transformers, bushings, and capacitor banks—can instantly identify risky areas and take corrective action before an unexpected failure occurs.

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.





# Monitoring CRITICAL ASSETS for abnormal conditions

Transformer bushings for overheat or underheat conditions



## Temperature Uniformity

Ensure uniform temperatures across transformer bushings 24/7



#### **Hot Spot Detection**

Continuously monitor contact points, switches, and other critical assets where hot spot conditions may occur



#### **Real-Time Data**

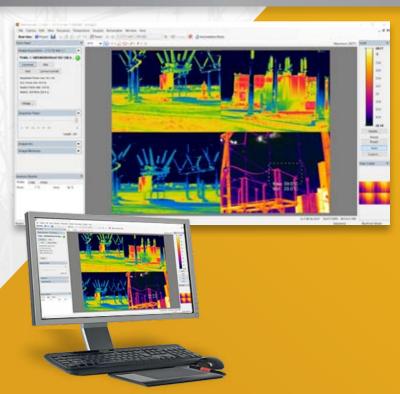
Observe your equipment and analyze data in realtime with customizable areas of interest; independent, continuous, or intermittent evaluation; and more.



## **CRITICAL ASSET MONITORING system**

The system is designed for remote monitoring of industrial environments—such as substation monitoring, where critical assets need to be monitored. The Fluke Process Instruments' solution is built off the TV40 series Thermal imaging camera with integrated thermal and visual sighting capability.

The ThermoView Critical Asset Monitoring software provides a fully integrated thermal analysis of large areas where fixed multiple cameras or a single pan and tilt camera is needed. The software not only controls the pan and tilt system, but also provides advanced alarming on changing temperatures over a historical time period, or differential temperatures between two discrete areas. Alarm output can be mapped to discrete I/O modules or output over a Modbus or Ethernet/IP network.



### **PAN** and **TILT**

With IP66 housing, the Pan and Tilt was designed to protect your thermal imager from dust and water, even in the harshest manufacturing environments. The Pan and Tilt housing accessory also features our ThermoView Critical Asset Monitoring Software, which is the ideal solution for sophisticated analysis based on absolute, differential, or rate of change asset temperature conditions.





## **OUTDOOR** Enclosure

With an IP66 rating, our outdoor enclosure for the ThermoView TV40 ensures that your temperature monitoring system won't stop due to bad conditions. With weatherproofed installations, the Outdoor Enclosure provides a high protection rate, a sunshield, and a temperature-controlled heater for cooler environments.

#### **Fluke Process Instruments**

#### Americas

Everett, WA USA

Tel: +1 800 227 8074 (USA and Canada, only)

+1 425 446 6300

solutions@flukeprocessinstruments.com

#### **EMEA**

Berlin, Germany Tel: +49 30 4 78 00 80 info@flukeprocessinstruments.de

#### China

Beijing, China

Tel: +8610 6438 4691 info@flukeprocessinstruments.cn

#### Japan

Tokyo, Japan Tel: +81 03 6714 3114

info@flukeprocessinstruments.jp

#### **Asia East and South**

India Tel: +91 22 6249 5028 Singapore Tel: +65 6799 5578 sales.asia@flukeprocessinstruments.com

#### **Worldwide Service**

Fluke Process Instruments offers services, including repair and calibration. For more information, contact your local office.

#### Web

www.flukeprocessinstruments.com

#### Find us on social media:











©2019, 2020 Fluke Process Instruments. Specifications subject to change without notice. 4/2020 6012823b-en

Modification of this document is not permitted without written permission from Fluke Corporation.