



## APPLICATION SPOTLIGHT – Utilities



Extend  
Product Life



Reduce  
Downtime



Reduce  
Costs

# CONNECTIONS IN ELECTRICAL TRANSMISSION

## INSPECTING SUBSTATIONS AND TRANSMISSION LINES

### THE CUSTOMER'S CHALLENGE

If an electrical connection isn't working properly, your transmission system may not operate efficiently or safely. It's important to regularly inspect every connection to ensure that they are in working order, but this can be a challenge. Every system has a lot of small connections, and they are often located high up out of reach. If you have to do an inspection in the bright sunlight, you may miss the fault.

### A SOLUTION

Connections get hot before they fail. Conducting regular surveys of substations and transmission lines using thermal imaging devices can give you a full picture of potential problems. A high-definition handheld thermal camera, such as the FLIR T1020 with a 12° lens, is an ideal solution for inspecting small connections across the transmission system. You can measure temperature from a safe distance with the highest accuracy and see connections with stunning image clarity. You'll see more detail and find hidden problems before they lead to costly system failures or shutdowns. In addition to a handheld solution, you can also incorporate a UAS with onboard thermal imaging, such as the FLIR M210 RTK XT2 R 640-19 mm (30 Hz). This overhead solution allows you to inspect from above the substation and clearly see connections that are not visible from the ground. With both a handheld and overhead inspection program, you are more likely to find hard-to-see problems fast.

### THE RESULTS

Routine inspections with a thermal imaging device can help you ensure that there are no operational inefficiencies down the line due to a connection failure. You'll have the capability to diagnose problems before outages occur – minimizing the cost of repairs, maximizing equipment life, and keeping the power on for customers.

For more information about FLIR in substation/transmission, or to schedule a product demonstration visit: [www.flir.com/substation-transmission](http://www.flir.com/substation-transmission)

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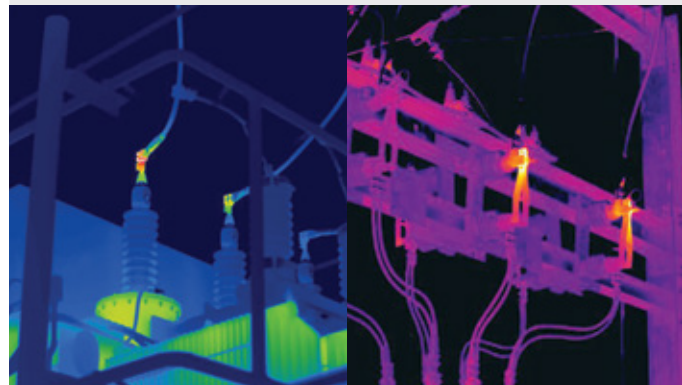
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*It's important to inspect every connection so you don't miss a potential failure.*



*A combined on-ground and overhead thermal inspection ensures you don't miss a hard-to-see problem*



M210 XT2 R



FLIR T1020™

