

# Optimize uptime and business continuity

Okken - Thermal Monitoring



# Bolster IR inspections with 24/7 thermal monitoring

How much does an hour of downtime cost? At a stock exchange, lost transactions could total €6 million. A petrochemical plant may lose €100,000 in productivity. And for hospitals, besides the material cost, there is also the risk of putting human lives in extreme danger, in addition to its liability.¹

Given these major risks, keeping critical equipment up and running is a priority for buildings and facilities worldwide. In this respect, their objectives are three-fold:

- Maintain operational uptime and business continuity
- Reduce operational expenses and total cost of ownership
- Protect building occupants and electrical distribution equipment

While infrared (IR) thermography inspections are an effective way to identify faulty or loose connections in electrical distribution systems, they cannot detect critical conditions that arise between scheduled scans, nor alert you to temperatures rises in areas that are inaccessible for thermography technology. Okken thermal monitoring enhances existing condition-based maintenance programs by providing 24/7 thermal-risk detection and by sending alerts when temperature measurements are outside pre-determined limits.

### Minimize downtime, increase safety

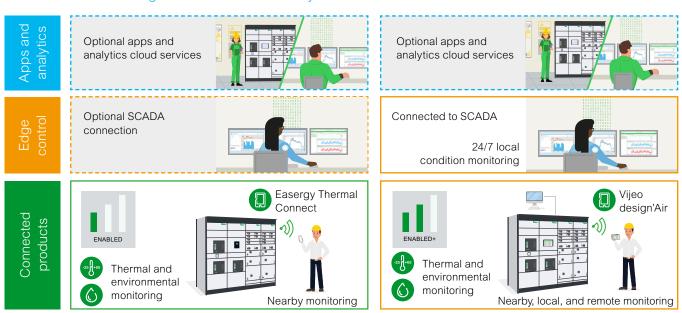
The Okken thermal monitoring solution is based on a robust and proven architecture, standardized modules, and Schneider Electric high quality devices. Permanently installed sensors on busbar connections, cable compartments, and breaker terminal connections provide continuous monitoring that performs predictive maintenance. The solution not only detects potential hazards, but can send instant alerts to operations and maintenance teams, allowing them to respond before any unsafe or damaging conditions can occur. The solution minimizes downtime and increases safety, and can help to reduce insurance premiums related to fire risks.

# Deploy locally or remotely – it's your choice!

Incorporated within the EcoStruxure<sup>™</sup> Power platform, this tested and validated thermal monitoring solution provides scalable connectivity, and gives you the choice of local or remote monitoring:

- Enabled: allows nearby thermal and environmental monitoring of LV switchboards, by means of inspection from a range of just a few meters, via smartphone or Android tablet.
- Enabled Plus: enables nearby, local monitoring via an HMI touchscreen display on the switchboard or an IOS/Android tablet with optional SMS notification, and remote monitoring, via Schneider Electric edge control or other SCADA-compatible solution.
- EcoStruxure Asset Advisor: offers cloud-based digital services for your critical equipment, that evaluates live data from your connected assets and applies advanced analytics to identify potential threats. Our experts provide web-actionable dashboards, timeline reports, and recommendations, with optional on-site support.

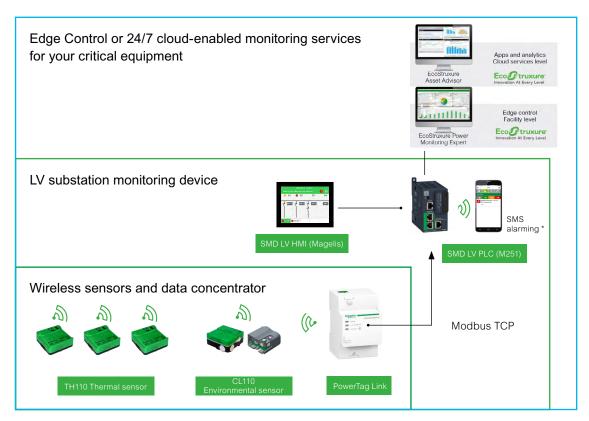
### Okken thermal monitoring with scalable connectivity



### Perform the right tasks at the right time

As part of the EcoStruxure Power architecture, the Okken thermal monitoring solution represents a complete, facility-wide thermal and environmental monitoring network. Through wireless data concentrators and other communication interfaces, thermal and environmental measures are uploaded automatically and continuously to local and cloud-based analytic applications.

### Communication architecture



When deployed with Schneider Electric apps, Okken thermal monitoring provides long-term trending data that can help facility managers detect gradual deterioration, so they can address potential issues well before they occur. Additionally, Schneider Electric experts can offer analytic and advisory services, and can oversee multiple facilities from a single central operations center. Predictive, condition-based maintenance can be scheduled, ensuring the right task is performed at the right time and place, ensuring that the facility's maintenance spend is optimized.



Okken thermal monitoring checks temperature and environment at critical points, including:

- Main busbars (fishplates)
- Power circuit breaker busbar terminal connections
- Drawer environment (ambient T<sup>o</sup> and humidity)
- Busbar customer connections (incomer zone)

# Okken Switchboard Solutions

Okken switchboards are complete and customized low-voltage (LV) solutions for power distribution and motor control. With industry-leading design and safety features, Okken solutions answer the need for superior operational safety in today's high-performance LV power applications. Versatile and durable, they have the comprehensive capabilities and intelligence you need to keep your business competitive.

For complete installation details, please consult Okken's Installation Guide.

Schneider Electric	Schneider Electric Partner

