S&C Critical-Assets Monitoring Solutions: SENSOR APPLICATIONS

Keeping your critical switchgear assets reliable is hard work, especially with all the environmental conditions in which it operates. Extreme heat and cold, storms, air particles... You name it – your gear is subjected to multiple elements and contaminants that can impact its performance.

Issues affecting your gear...



Heat



Moisture



Cold



Loose connections

can lead to these common failure modes:

- Dielectric contamination
- Insulation degradation
- Overheating from poor connections

How do we pre-empt these failures?

MONITORING



Asset Failure Mode	Measurement
poor connections	temperature
insulation degradation	partial discharge
dielectric breakdown	humidity



Critical-assets monitoring solutions

Temperature sensors

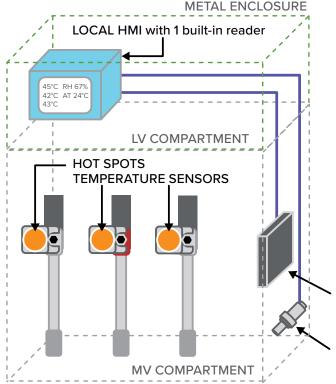
detect internal heat rise that may indicate loose connections, overloading, presence of harmonics, or other conditions that could lead to failure.

Humidity sensors

monitor the moisture level within the equipment, indicating a breakdown of the air dielectric and inducing the potential for corrosion.

Partial discharge sensors

detect high-frequency discharges that indicate a possible insulation breakdown that over time can lead to failures.



Sensor technology is easy to apply and use.

Sensors can be installed in S&C switchgear at the time of factory manufacture or field retrofit:

- metal-enclosed switchgear
- pad-mounted gear
- Micro-AT® Source-Transfer Controls

ANTENNA for Hot Spots Temperature Sensors and PARTIAL DISCHARGES DETECTOR

 ${\bf HUMIDITY\ and\ AMBIENT\ TEMPERATURE\ SENSOR}$

Benefits of monitoring:

- Avoided unplanned outages
- Increased equipment uptime
- Early identification of potential issues before they become expensive repairs
- Reduced maintenance costs through proactive strategies

S&C 24/7 Web-Based Monitoring and Notification Service

S&C Advantages

Few others offer 24/7 technical services.

- Access to S&C field service, consulting, analytical services, engineering, etc., help solve more advanced problems.
- S&C offers deep expertise in medium-voltage distribution and high-voltage transmission systems.
- S&C provides monitoring hardware from a variety of suppliers.





CONTACT YOUR S&C REPRESENTATIVE FOR INFORMATION

Visit the Asset Management page at sandc.com

