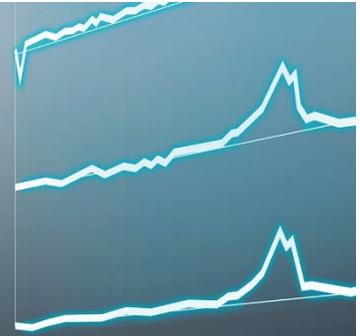


# SIEMENS

*Ingenuity for life*



## Grid Diagnostic Suite – SIPROTEC Dashboard

Protection relay data at a glance

Powered by  
MindSphere

[siemens.com/iot-energy-automation](https://www.siemens.com/iot-energy-automation)

### Transparency increases efficiency

Protection relays sit at the very heart of our power grid infrastructure. They operate silently inside substations and listen to the 50Hz or 60Hz AC-heartbeat of the power lines. Once they come into action, however, literally every millisecond counts in initiating switching operations to avert disaster and alert the grid operator about a specific fault situation. This is where the SIPROTEC Dashboard comes into play.

As part of our Grid Diagnostic Suite, the SIPROTEC Dashboard benefits from a new communication architecture. SIPROTEC 5 devices communicate not only to the substation automation level but also into the MindSphere cloud. From here, the SIPROTEC Dashboard views can be accessed via any browser of your choice, whether from a desktop PC or any smart mobile device.

### Empowerment of maintenance crews

The SIPROTEC Dashboard empowers operational crews in their troubleshooting of faults in the power grid. Instead of waiting for information from the control center, they can now directly access key data from a given protection relay that initiated a trip. This includes a view of its geographical location on a map.

The Dashboard also offers additional insights into compact condition monitoring such as the switched fault current (I<sub>2t</sub>) or temperature hotspots of transformers or switchgear – all very helpful indications for making an early assessment of the situation on the ground.

**While the role of IT/OT infrastructure is steadily increasing in the energy domain, new standards for Cyber Security are emerging and are constantly being refined worldwide to ensure safe operations.**

The SIPROTEC Dashboard offers relevant Cyber Security clues by tracking security events related to successful or attempt-ed device log-ins.

The SIPROTEC Dashboard is an innovative new offering in combination with our SIPROTEC devices and offers valuable analyses your protection fleet at a glance.

### Customer benefits

- Simplifies workflows for faster response times
- Increases grid availability and service quality
- Reduces investment and operating costs
- Easy integration and seamless data availability
- Meets industry-relevant security standards
- No vendor lock-in due to use of open IoT standard protocols



## Event Views

### Notifications

- Summary list view of the latest events
- Drill down option for each event

### Protection trips

- Focus on trip events only, incl. trip current and fault location
- Expand into device-level information
- View by list, map and trend

### Security

- Security events ranked by level of suspicion
- View by map, day and hour

## Condition monitoring views

- Circuit breaker I<sup>2</sup>t statistics
- Switchgear hotspot measurements
- Transformer hotspot measurements
- Transformer tap position statistics

## IoT grid views

- List of onboarded devices
- Statistics of transmitted data points

**SIPROTEC Dashboard**

A MindSphere application which collects data from protection relays across the entire grid and offers a variety of visualizations to simplify workflows and enable faster response times.



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