



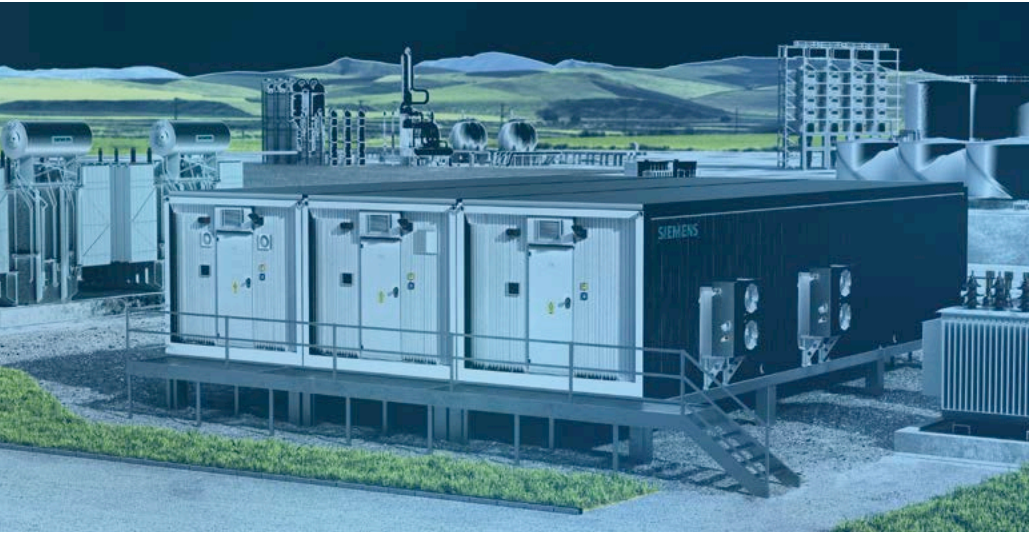
| NXpower Monitor

The digital care-taker for your electrical distribution systems
at the medium- and low-voltage levels
[siemens.com/nxpowermonitor](https://www.siemens.com/nxpowermonitor)

SIEMENS

Your digitalization journey from data to value to action

The Industry 4.0 revolution based on the Internet of Things (IoT) is motivating many organizations to begin their digital journey across different industry verticals.



The first step is to connect industry assets like electrical distribution equipment at the field level to a common remote IoT platform through a secure and reliable IoT connectivity device popularly known as “IoT gateway.” The second step is to access, visualize, and analyze the data using an IoT application hosted in a secure and reliable cloud environment. The goal of the journey is to help industry acquire real value by obtaining the necessary assets and business transparency and establishing continuous improvement and optimization processes.

The challenges are getting more and more complex. Networks will be loaded and challenged in a different way by more and more integration of renewables, higher loads in distribution networks and the general call for action regarding sustainability. The resiliency has to be increased. The analysis of data enables targeted service actions and will increase safety and availability.

Our solution

We help you ...

- gain transparency across your electrical distribution assets
- identify optimization strategies to reduce your operation costs
- better manage risks by identifying potential asset breakdowns and failures before they happen

As your trustworthy partner, we provide ...

- reliable and safe IoT-ready electrical distribution assets, including medium- and low-voltage switchgear
- reliable and secure IoT connectivity hardware like gateways and edge devices
- open and secure IoT ecosystem MindSphere
- ONE tool for electrical distribution – IoT application NXpower Monitor

Your benefits

- OPEX optimization
- CAPEX deferment
- Risk management
- CO₂ footprint optimization
- Optimization of asset utilization



Oil and gas industry



Chemical industry



Mining industry

NXpower Monitor

A cloud-based application that will launch and accompany your digital journey in energy distribution

NXpower Monitor provides you with different views for visualizing and monitoring electrical assets in a substation or substations across multiple locations from anywhere in the world at anytime.

Transparency thanks to asset summary and operation overview

The asset summary offers you key performance indicators, which allows you to monitor your assets and helps you identify optimization potentials for improving availability, energy consumption, CO₂ emission and cost savings. An overview of the status of the individual feeders help to get fast information what is going on. The additional energy monitoring view allows you to monitor the energy consumption of critical loads on a time-series basis and compare it with similar loads at the same location or across different locations. This enables you to optimize both your energy costs and your CO₂ footprint. The included documentation view allows you to create your own asset-related central document repository system that will bring you even more peace of mind. Important documents will be always available from anywhere at any time.

Condition monitoring (optional)

The condition monitoring view allows you to monitor the health status of your asset remotely. This allows you to manage your risks better, improve operations and maintenance schedules based on the actual status of the assets rather than their theoretical condition.

The electrical assets can be e.g. switchgear and transformers. The switchgear monitoring on medium voltage side is based on temperature monitoring, humidity monitoring, circuit breaker monitoring and partial discharge monitoring. User can select individual type of monitoring based on availability of respective sensors. The medium voltage switchgear can be air insulated or gas insulated. The transformer monitoring is based on winding temperature, oil temperature as well as cooling system monitoring based on availability of respective sensors on transformer side.

Maintenance view (optional)

The maintenance view allows you to visualize all of the alarms along with their status and details. It also initiates an e-mail notification to your designated maintenance engineers with details on the alarms. This saves them time when it comes to defining the necessary corrective actions.

Through these features most of the time manual processes which calls for visits at site can be drastically reduced. Unplanned asset breakdowns will be avoided by detecting failures before they lead to a problem. This increases asset lifetime.

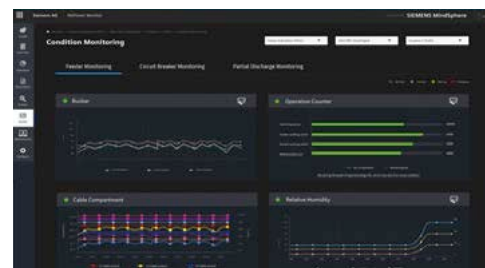
If you need to know, how much will be the ROI for digitalization for your specific case, then please contact us.



Assets overview



Operational view of connected switchgear feeder



Condition monitoring



Maintenance view

Note: The asset is typically a medium- and/or low-voltage switchgear.

**Find out
more**



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