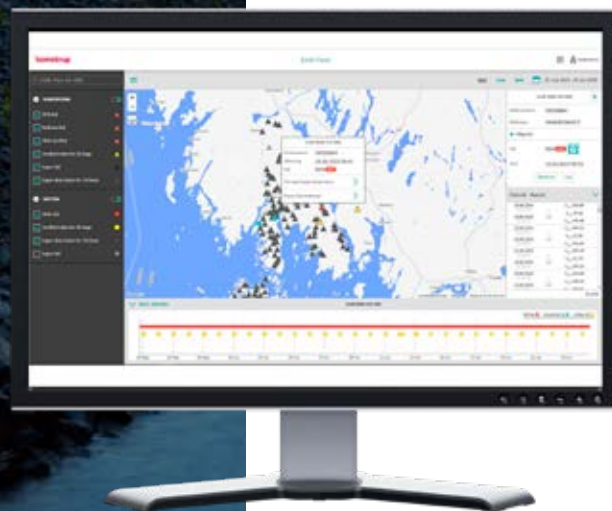


Earth Fault monitoring with
Power Intelligence

kamstrup

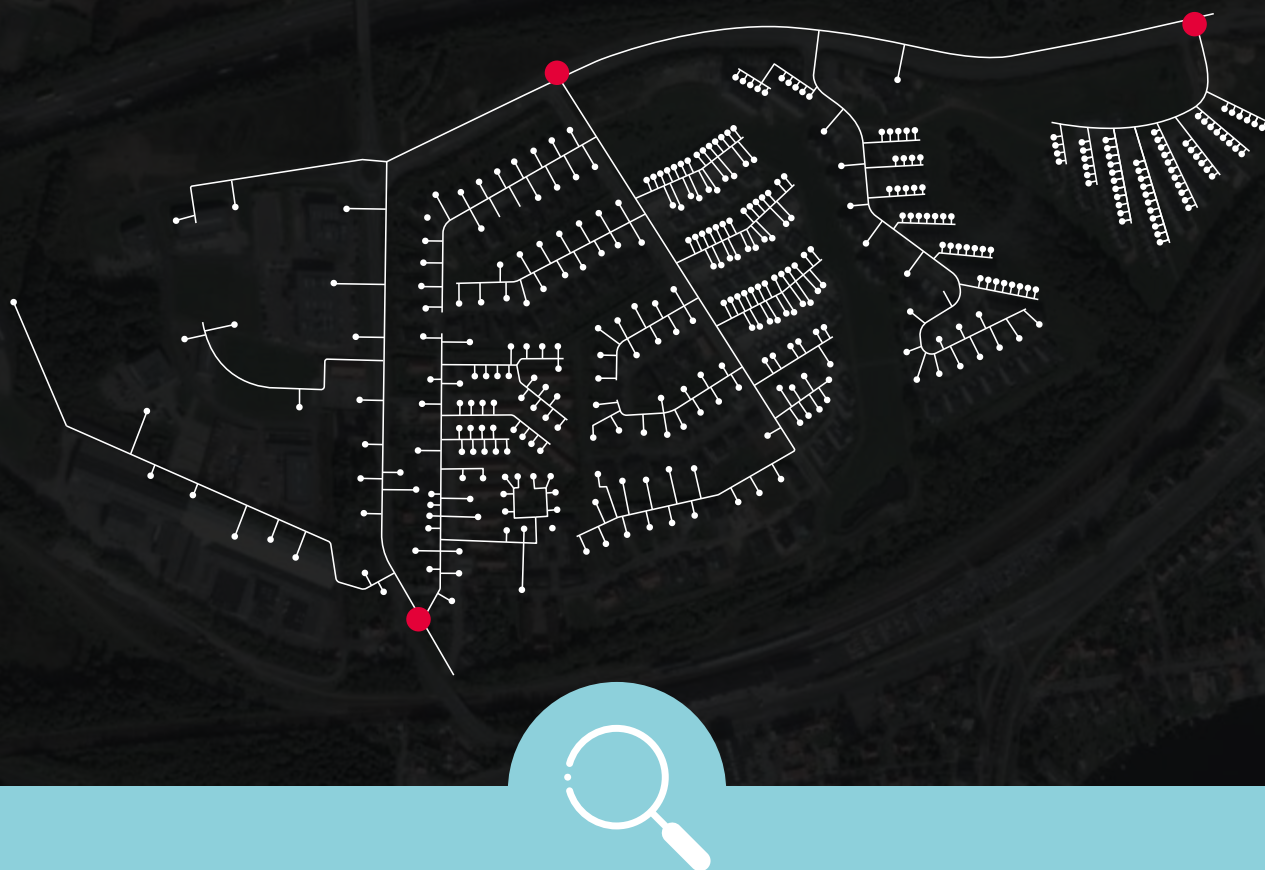
Get a full overview of earth faults

- Fast troubleshooting saves time and money
- Provide faster, more accurate customer service
- Prevent earth faults with proactive maintenance
- Web-based analysis platform available on the go



Earth fault data you can act on

Power Intelligence is an intuitive tool for monitoring earth faults in grid stations and in households.



Get the overview and respond quickly

See all your grid stations and households, both with and without earth faults. Split view displays data simultaneously both on the map and in a list. You thus have all the important information in the same window. You can go directly to the map application and see installations with challenges even at the address level.

Plan and stay ahead

With a better overview, you can optimise your planning so that you can perform maintenance on nearby grid stations, for example when visiting a grid station with faults. This saves you both time and money. At the same time, typical earth fault patterns/events leading to an earth fault can be identified, giving you the ability to prevent faults from occurring.

Have all your important data in one place

Kamstrup Power Intelligence is a web-based platform that requires only a browser.

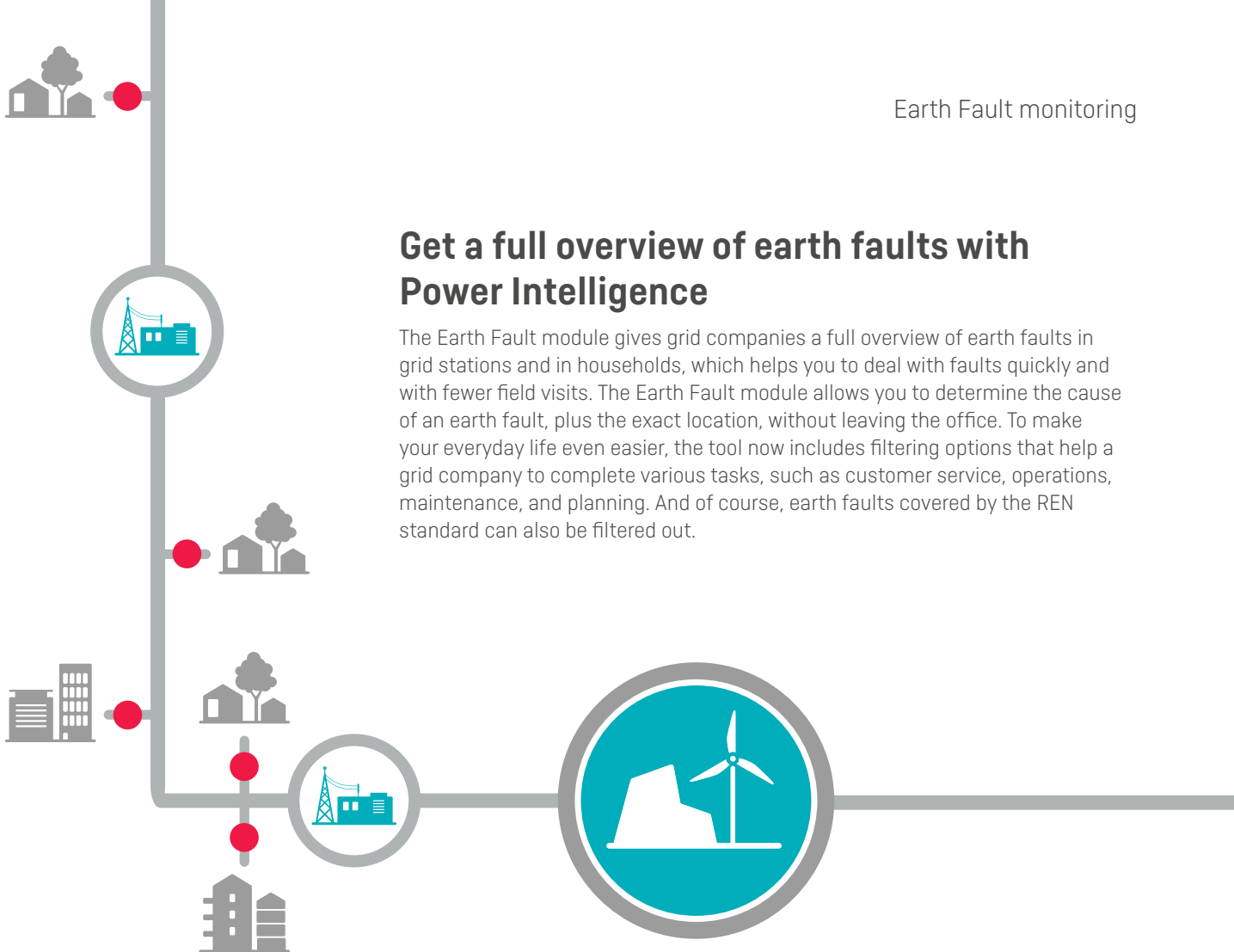
Any missing GIS coordinates can be entered directly into Power Intelligence, and you can add notes so that practical information about the individual grid station is always available, even when you are out in the field.

Give your customers the correct information

Set up rules for which earth faults you want to be alerted about and at the same time, get more information about each fault, so that you can provide your customers with more accurate, up-to-date information. This increases customer safety in the grid. The tool makes it easy to get an overview of household and grid station history, enabling you to provide accurate answers to customer requests.

Comply with the requirements of the REN standard

The Earth Fault module is equipped with a filter according to the REN standard that enables you to easily get an overview of the earth faults covered by the legislation and monitor them.



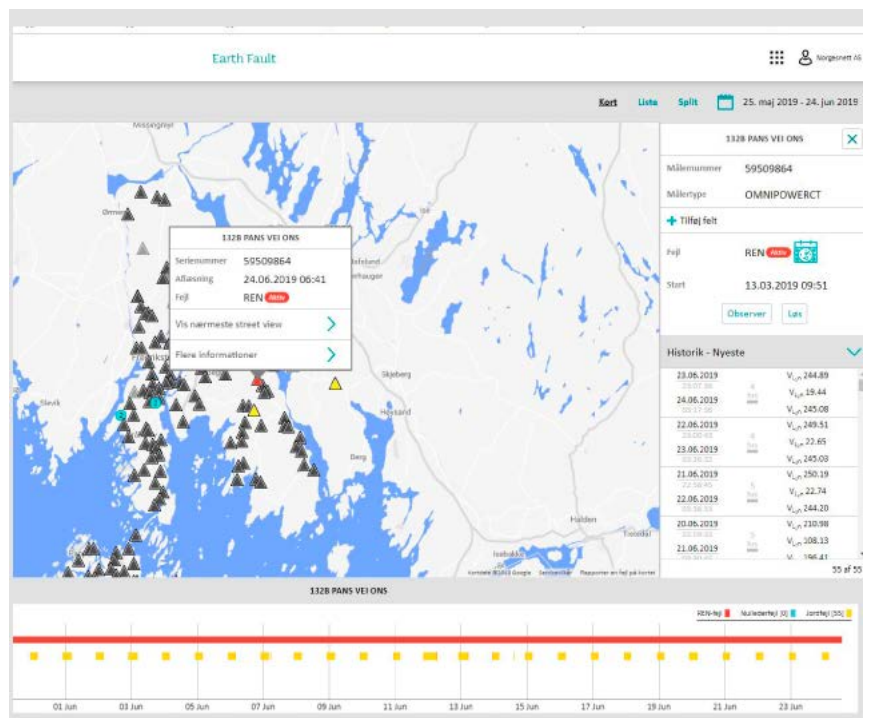
Get a full overview of earth faults with Power Intelligence

The Earth Fault module gives grid companies a full overview of earth faults in grid stations and in households, which helps you to deal with faults quickly and with fewer field visits. The Earth Fault module allows you to determine the cause of an earth fault, plus the exact location, without leaving the office. To make your everyday life even easier, the tool now includes filtering options that help a grid company to complete various tasks, such as customer service, operations, maintenance, and planning. And of course, earth faults covered by the REN standard can also be filtered out.

Find the pattern and make the right decision

The Earth Fault module visualises all earth faults by size, length, frequency, etc. Based on data patterns, you can determine the type of fault, making it is easy to distinguish between technical and man-made faults, for example.

The picture shows a fault on a grid station, which occurs daily at sunset because it is caused by the street lights. With this knowledge, the grid company can fix the fault directly instead of visiting the grid station and troubleshooting on site to find the cause.



Your digital adviser for better use of the grid and increased delivery reliability

Earth Fault monitoring is a module in Kamstrup Power Intelligence – an analysis tool that allows grid companies to better utilise the data collected in the AMS system. This gives you a solution that both meets the REN requirements right away and can be expanded with multiple modules, e.g. Power Flow and Power Quality Monitoring.

System requirements

The earth fault option must be selected in VisionAir in order for Power Intelligence to retrieve and display earth fault events.

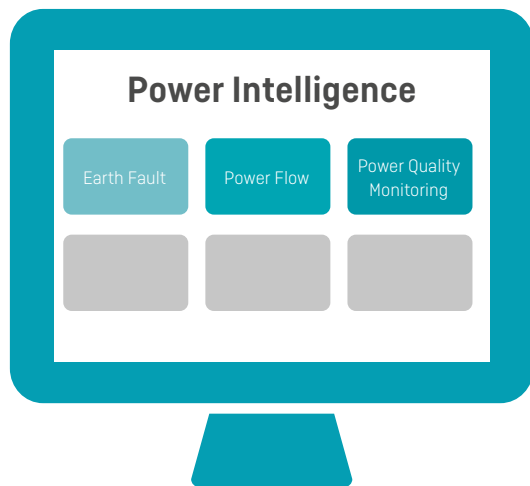
What Norwegian grid companies say about the Earth Fault module:

“We expect Kamstrup’s solution to reduce the amount of manual work used to detect earth faults, as we can see exactly where the faults have occurred on the maps.”

Lars Tønset, Project Manager at Røros E-verk

Supplement Earth Fault with Power Flow and Power Quality Monitoring

– all part of the Power Intelligence platform



Power Flow

Save time and money

- ➔ Make the right investments
- ➔ Reduce maintenance costs
- ➔ Get an overview of loads in the low-grid

Power Quality Monitoring

Get a quick overview of the voltage quality in the grid

- ➔ Localise voltage quality challenges before they evolve to end user requests
- ➔ Get detailed diagnostic data, such as outages, surges and undervoltages