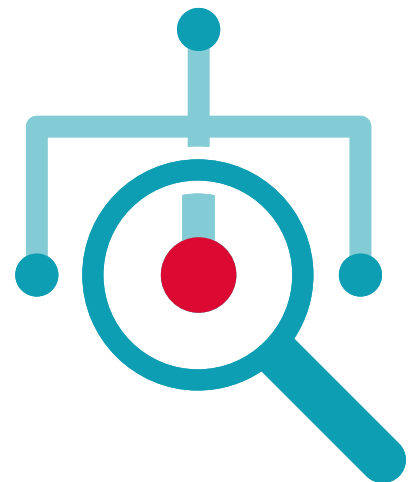

Analytics you can act on

- Get a complete overview of the heat distribution in your network
- Achieve full transparency down to individual buildings and pipe sections
- Identify the biggest heat loss causes
- Monitor the actual load and capacity in your network



Heat Intelligence

The more data you have, the more value you can create – but simply observing data “as is”, is no longer enough.

With Kamstrup’s analytics platform, Heat Intelligence, you move from basic meter data visualisation to comprehensive analysis in order to uncover what lies behind the data.

Only then can you act on it – and that is when the full value of your data is unlocked.



Data-based transparency

Heat Intelligence combines facts about your distribution network (pipe length, dimension, insulation, etc.) with data directly from your smart meters.

This gives you a whole new level of transparency – without having to invest in additional sensors in the field.

The tool calculates exactly how heat travels in your infrastructure and what this means for your heat supply. Visualised on an intuitive map of your supply area, this gives you an understanding of the hydro dynamics in your distribution network.

When you know what happens underground, you are able to better target your efforts and resources.

“The combination of our GIS data, models and meter data gives us a tool that can tell us how and where to act.”

*Utility Manager Helge Hansen
TREFOR Heat*

Create virtual meters

Using measurements from all end points in your distribution network, Heat Intelligence can calculate the temperature and flow even where when no meter is installed.

Live and updated daily

Heat Intelligence is automatically updated and recalculated daily with the latest data from your distribution network. The platform is web-based and available through My Kamstrup.

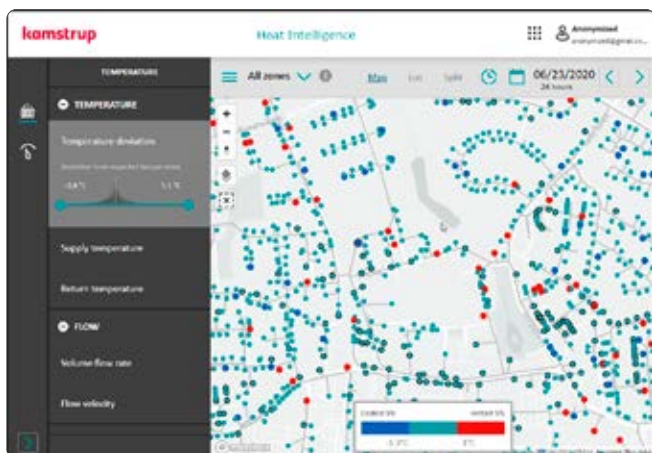
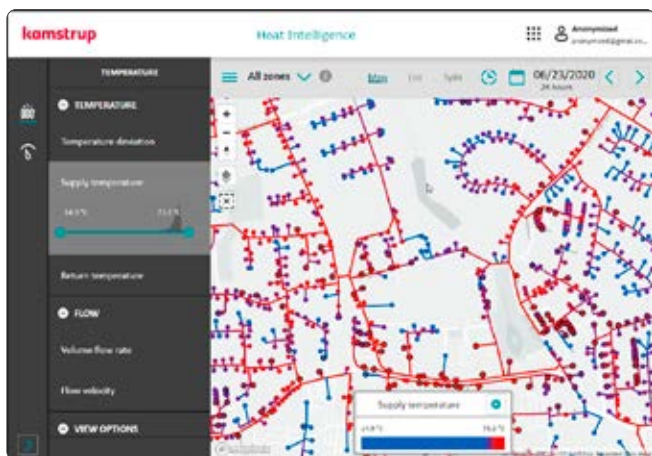
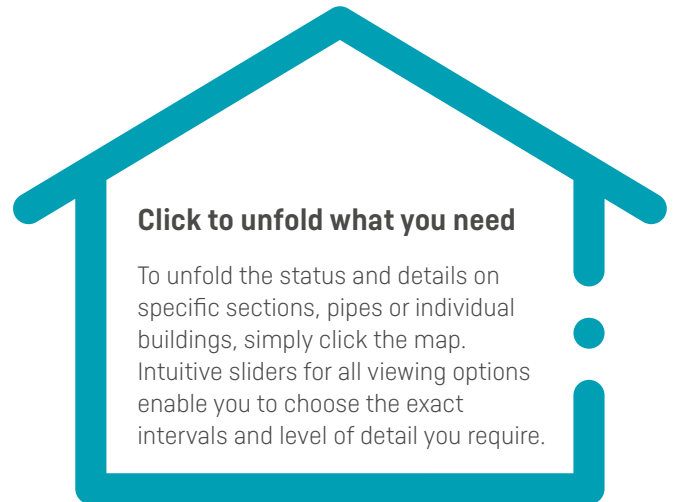


Heat Intelligence

– complete overview and detailed insight

Heat Intelligence provides you with fact-based decision support for continuous optimisation of your production and distribution.

Detailed information on supply and return temperatures, deviations and flows gives you the insight you need to react instantly. You also have a full overview of developments over time, which allows you to see and learn from the direct consequences of your decisions, the behaviour of end users and the condition of your pipes.



Document your quality of delivery

You are able to see exactly how heat moves through your network infrastructure all the way to the end users. This means that you can document precisely what you have delivered at all times.

You are also able to evaluate your temperature optimisation based on a visualisation of dynamically calculated facts rather than on a static model.

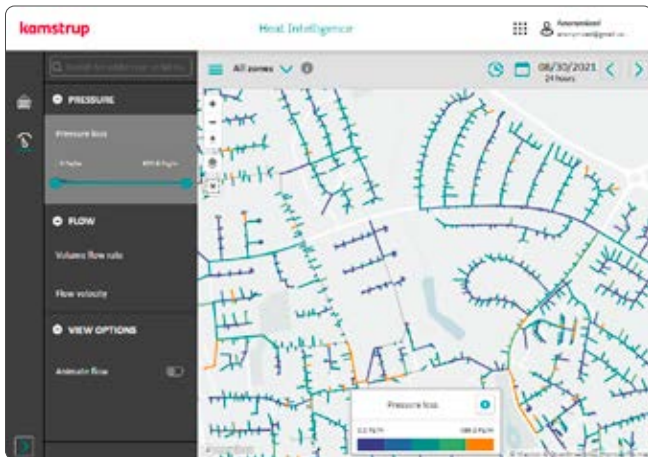
Map your heat loss

Continuous monitoring enables you to spot negative trends or developments so that you can react faster.

You simply define your own limits for temperature deviations based on what is relevant for you. The result is shown on the map, and you can act accordingly.

If the measured temperature is lower than expected, the issue could be a defect service pipe or poor pipe insulation. If higher, it could be caused by a leakage or a bypass.

Heat Intelligence

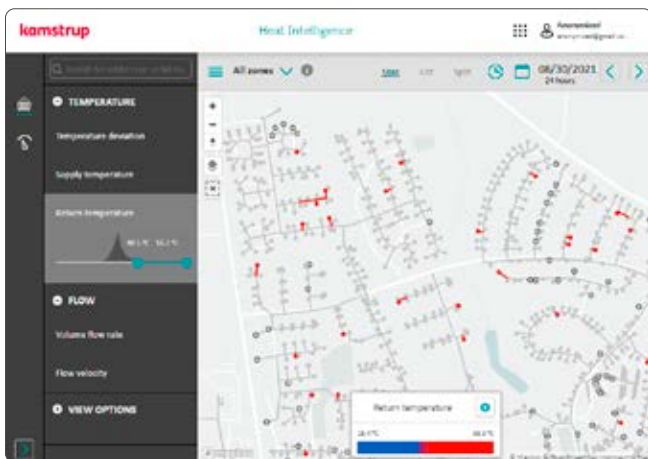


Monitor your load and capacity

By linking energy measurements with detailed pipe characteristics, Heat Intelligence gives you a precise picture of the load throughout your network.

You get insight into the match between theoretic planning and reality, enabling you to validate your design rules.

This allows you to maximise utilisation of your capacity and target investments in network maintenance by e.g. estimating pipe lifetimes based on their loads and conditions rather than just their age.



Identify what stresses your network

You can identify the buildings or consumers who put the most strain on your network by zooming in on specific buildings and pipe sections.

This enables you to uncover the root cause of the problem, e.g. the heat installation or end-user behaviour. And that is your basis for providing your customers with targeted advice and guidance – to the benefit of their heating bills and your network performance.

How to get on board

The map overview in Heat Intelligence is created based on GIS data for your distribution network, pipe data and integration to your meter data management system.

Kamstrup will validate and decide if your GIS data has the right quality via a GIS pre-study before you proceed to a full onboarding. Then making sure you can succeed and get the full value of the solution.

This implementation is performed in close cooperation with Kamstrup to ensure that you get off to a good start utilising the full value of your data.

Kamstrup A/S

Industrivej 28, Stilling
DK-8660 Skanderborg
T: +45 89 93 10 00
info@kamstrup.com
kamstrup.com