
DIEHL
Metering
37° C
ENERGY
NETWORK ANALYTICS
17,212 kWh
64° C

MAKE YOUR HEATING NETWORK **MORE INTELLIGENT**

HOW WOULD YOU LIKE TO UNLOCK

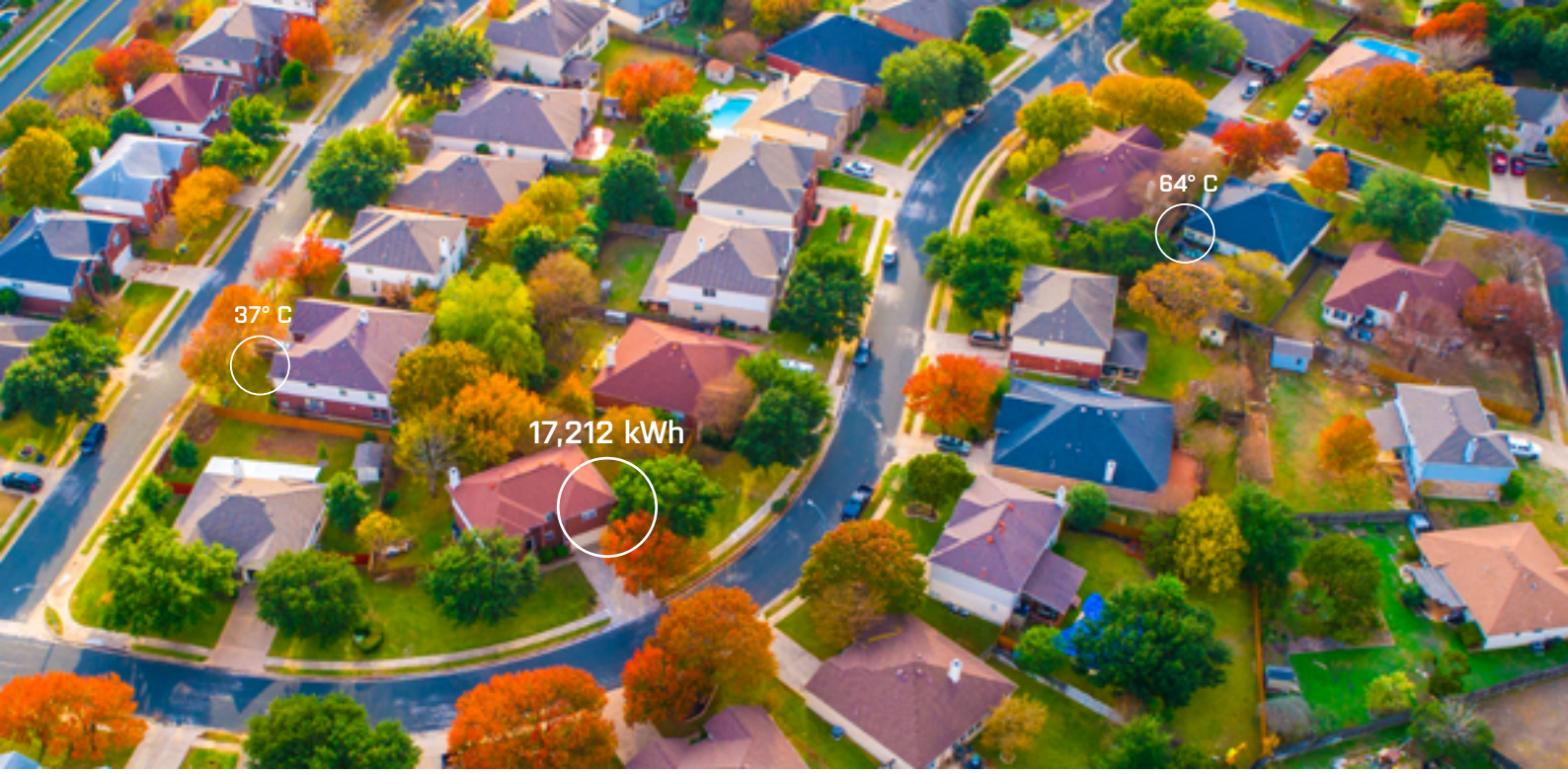
new value in your heating network without having to commit to a major investment?

With Diehl Metering's Energy Network Analytics, you transform your heat meter data into valuable network intelligence. Using your existing Diehl Metering smart meters and flow sensors, this powerful solution mines a wealth of information from your system to deliver unique, actionable insights. You'll get a precise overview of heat distribution and efficiency in your network. You'll be immediately alerted to any defects or leaks. And you´ll even be able to calculate virtual consumptions by aggregating data from multiple physical sensors. The benefits for your business? Increased network efficiency, reduced costs and higher customer satisfaction.

HOW DOES IT WORK?

Energy Network Analytics uses communicating heat meters and flow sensors to capture valuable data about individual buildings, individual consumptions and your heat distribution network as a whole. All this information is then transmitted to the powerful Central Data Management software IZAR@NET 2 if hosted locally on your server – or IZAR PLUS PORTAL if you prefer Software as a Service.

The software interprets the data to deliver a clear dashboard of your system, providing insightful analytics and useful alarms to alert you to anomalies in your heating network. What's more, IZAR software offers multi-utility and multi-sensor support, allowing you to combine different parts of your business on a single platform.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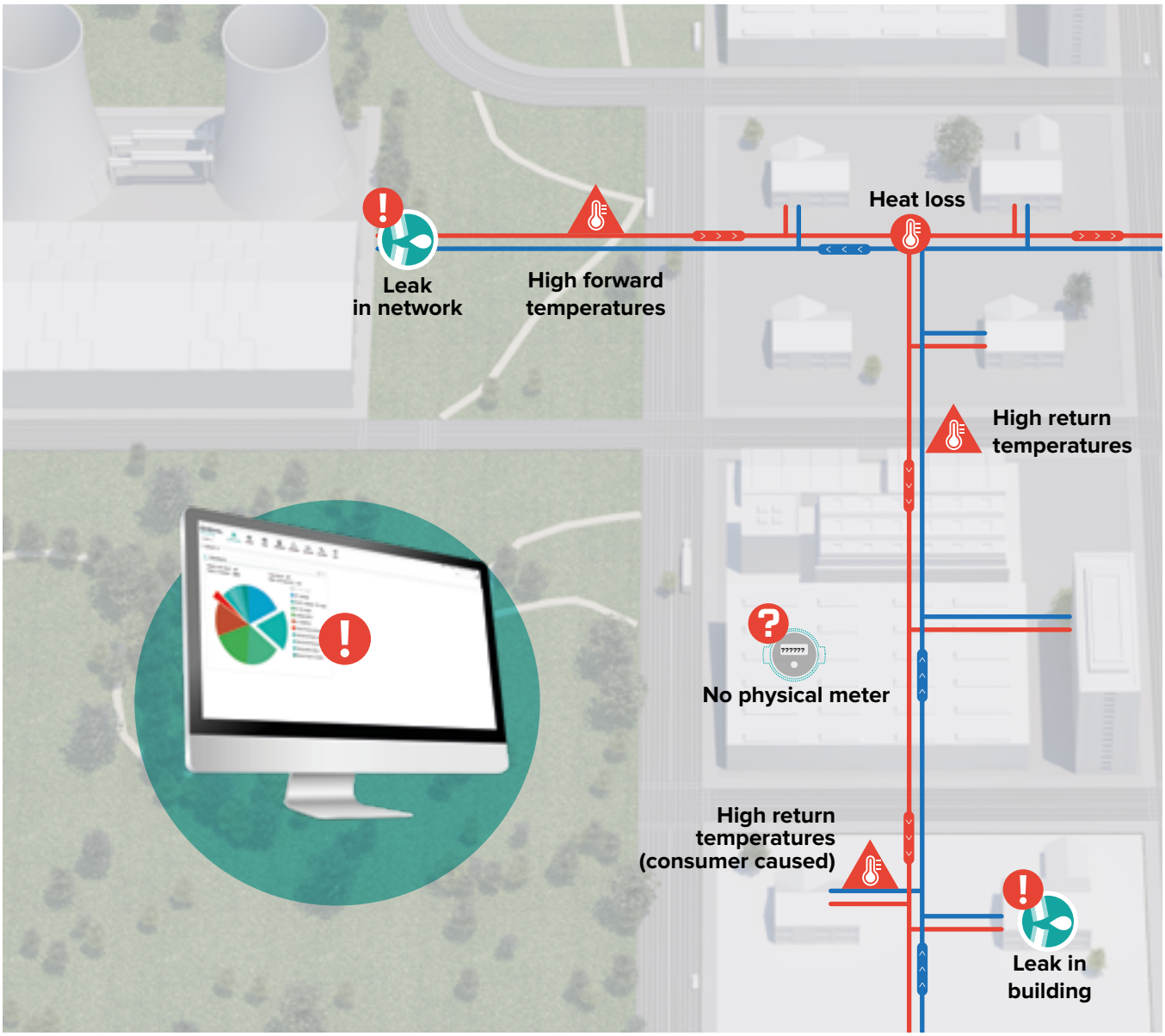

Heat loss
Leak
in network
High forward
temperatures
High return
temperatures
No physical meter
High return
temperatures
(consumer caused)
Leak in
building

SWARM ANALYTICS
FOR IMPROVED TEMPERATURE SPREAD

With Energy Network Analytics, you can easily identify high return temperatures in your network, potentially caused by defective transfer stations or poor heating patterns. With Swarm Analytics you are able to monitor important system parameters for each heat meter, such as return temperature and spread (Delta T). On the IZAR software platform, you'll be able to consult charts clustering consumers together according to their consumption class (low, medium or high). And you'll be able to precisely identify where high return temperatures are occurring and why – empowering you to fix faults quickly or provide consumers with tailored consulting to help them improve their consumption habits.

SMART LEAK DETECTION

Leaks in your distribution network and in buildings can be extremely costly, as well as posing safety risks to consumers. That's why Energy Network Analytics includes a Smart Leak Detection function. Gathering data from flow sensors and ultrasonic heat meters like SHARKY or SHARKY 775, Energy Network Analytics evaluates flow rates in your network and prompts alarms if a leak is detected. Within 90 seconds of a pipe bursting, the SHARKY meter will send a notification with precise information about the location and nature of the problem. You can even customize the service to send leak alarms to consumers, helping to grow customer satisfaction.

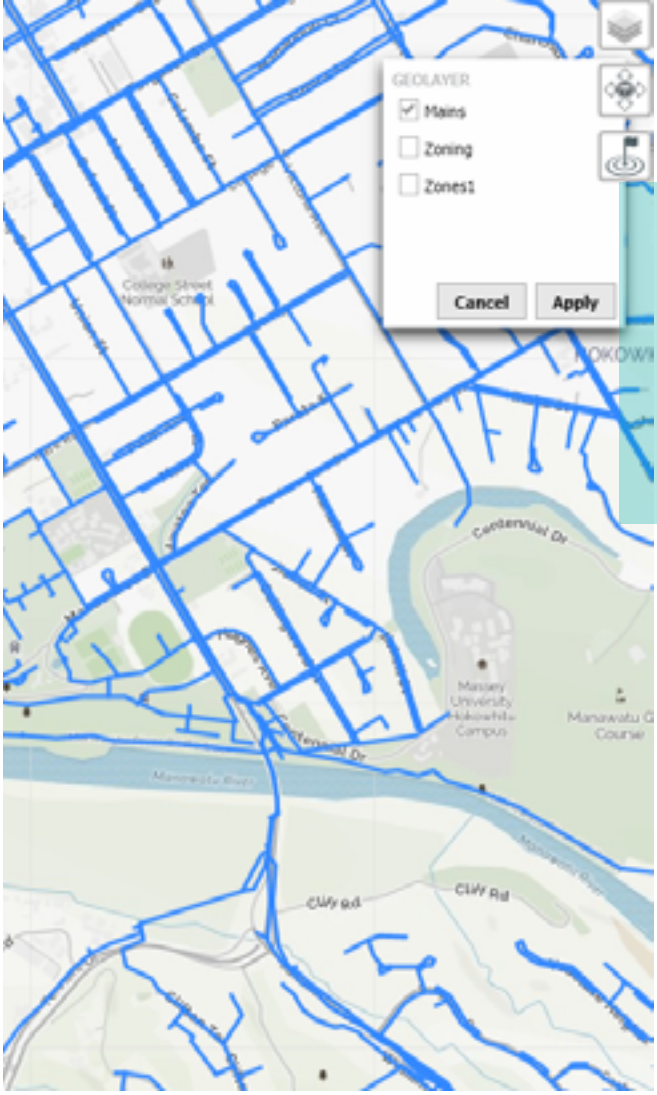
More information about Leak Detection

HEAT DISTRIBUTION OPTIMIZER

Any heat you produce that doesn't reach consumers means additional cost, wasted energy, and poor sustainability. Heat loss can be caused by aging pipelines or inadequate insulation.
The challenge is to know where this is happening in your network – and that's where Energy Network Analytics comes in. By permanently monitoring flow temperatures at multiple points, it determines the temperature in the pipes to a very high degree of accuracy. Using your IZAR software, you can define your own thresholds for alerts – and you'll then be immediately notified to signs of heat loss early on in the process. At the same, you'll be contributing to lowering CO_2 emissions.

BOILER EFFICIENCY ANALYSIS

Without regular efficiency monitoring, most boilers operate significantly below their rated efficiencies. That's why Energy Network Analytics compares the energy brought into your boiler by gas with the thermal energy captured by SHARKY meters. It then calculates the efficiency of the boiler as a percentage relative to the claimed efficiency of the manufacturer. As a result, you'll have near-real time tracking of your boiler's efficiency – which means you can monitor it long term and optimize the lifetime costs.



MAP LAYERS FOR A CLEAR OVERVIEW OF YOUR GRID AND DEVICES IN ONE PLACE

One of the key benefits of IZAR Smart Heat Features is that it interprets the masses of data in your network and repackages it in an easy-to-understand format. Map layers offer you a clear overview of your network, allowing you to visualise the precise geographic location of the different devices and meter endpoints in your network – and to pinpoint the places where you need to intervene.

DIGITAL TWIN SIMULATION FOR A CLEARER VIEW

By using multiple meters, you can gather large amounts of data about different parts of your heating network – but that doesn't always give you the big picture. Fortunately, Energy Network Analytics has the answer. By collecting data from numerous neighboring devices, it can create virtual meters that calculate consumption values for a given building, group of buildings, or any sub-section of your network. You'll be able to monitor overall energy efficiency even more accurately and identify more opportunities for cost savings. You can even generate new business by reselling virtual meter analyses to third parties.

FOR MORE INFORMATION:

Contact us or a personalised analysis of your needs and find out how IZAR Smart Heat Features can help increase your network efficiency.

Visit our website:
www.diehl.com/metering

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