



Article | Danfoss Climate Solutions — District Energy

Take district heating network optimization to new heights with Leanheat[®] Monitor

Did you know that Leanheat[®] Monitor can give you a comprehensive overview of both the primary and secondary sides of your district heating network? Enabling you to measure key parameters, such as temperature and pressure, so you can optimize your network's end-point efficiencies? Find out how it's possible in this article.

Leanheat® Monitor is Danfoss' advanced software solution, or SCADA, for monitoring and managing district heating networks. In addition to offering a user-friendly interface, Leanheat® Monitor enables you to integrate existing and new electronic controllers both on the primary and secondary side of the network to get real-time measurement points throughout the grid. So, if you have end-users in your district heating network with ECL120 or ECL310 controllers installed in their heating stations, you can connect them to Leanheat® Monitor and monitor pressure,¹ temperature and substations real-time operations at various points in your network. Integrating the primary and secondary sides of your district heating network offers you several advantages:

- 1. Get a better, more detailed overview of your entire network for more efficient operations and maintenance.
- 2. Optimize your station performance and temperature settings by analyzing data from the furthest sections of your district heating grid.
- **3.** Use Leanheat[®] Monitor's built-in charts to analyze a wide range of data points for more insight into your network's performance.
- **4.** Extract historical data to examine your network's performance over time.²
- Adjust network settings, set alarms, and troubleshoot

 both on the primary and secondary side remotely.
 This saves time and helps reduce operational costs.
- **6.** Implement energy optimization measures, such as automatically regulating network temperature levels during winter or summer periods.





Involve end-users in

energy-saving measures

Offer end-users the opportunity to work with you to reduce energy costs. By offering to lease heating stations equipped with ECL controllers, or by connecting existing ECL controllers to the district heating network, you can help end-users to contribute data to Leanheat[®] Monitor, helping you to set detect tangible actions at our critical customers throughout like network settings or replacements to optimize return temperature and – at the end of the day – reduce heating bills.

Improve data and energy security

Leanheat® Monitor operates on an ISO27001 certified platform that enables GDPR compliance. The service is hosted via a cloud service provider with over 40 security certificates globally. This focus on security offers your utility a superior level of encryption and data protection, which helps you ensure that customer data is stored securely. It ensures that you're NIS2 complaint on your monitoring cloud.

¹ Only available on the ECL310 Comfort Controller.

² Historical data is only available for the period of time the ECL has been installed.

We're with you through the **whole process**

When you choose Leanheat[®] Monitor, we assist with the complete migration process, as well as the ECL controller integration. The entire process is handled online, which saves you time and resources.

ENGINEERING TOMORROW

By implementing Leanheat[®] Monitor, you can improve your utility company's efficiency and operational costs over time. You can ensure a more stable, optimized network operation by monitoring several measurement points throughout the grid. With Leanheat[®] Monitor, you get a system that offers you an attractive payback time, can help you achieve your energy efficiency goals and work with your end-users to achieve greater energy savings over time.

Fact box: About the ECL Comfort Controllers

Danfoss ECL series are intelligent temperature controllers for district heating (DH), district cooling (DC) and domestic hot water systems (DHW). The controllers share the main function of weather compensation. With built-in or dedicated application keys, they can be adapted to a variety of district heating systems, ensuring a high level of comfort and optimum energy utilization. Find out more about our ECL controllers here: <u>https://www.danfoss.</u> <u>com/en/products/dhs/electronic-controls/</u> <u>electronic-controllers-and-application-keys/</u> <u>ecl-comfort-controllers/</u>



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