Termis District Energy Management

Unleash the potential of every employee in the utility to serve your customers better.

District Energy Management software reduces a utility’s energy costs and usage to provide the appropriate cooling/heating service, minimize heat losses, and streamline the network operations.
80% of Your Capital is Invested in the Distribution Network

Termis District Energy Management puts you in control.

Without real-time intelligence on operational performance, network status, and customer demand, it is a challenge for district energy utilities to react swiftly to changes in these conditions.

Regulatory standards are becoming more and more complex and require extensive documentation – even contingency plans for the unexpected. District energy utilities are moreover expected to reduce energy consumption and CO₂ emissions.

Another major challenge is to minimize the energy loss of energy supplied to the network. Most district energy utilities operate at a constant supply temperature despite fluctuations in demand and changing weather conditions.

Many utilities have invested significantly in SCADA systems. This allows for a partial monitoring of the network, but does not provide the option to proactively simulate the impact of changes in conditions on the distribution network.

Most district energy utilities have roughly 20% of their investment vested in the actual plant. The remaining 80% is vested in the distribution network. And most district energy utilities have little or no idea of what happens to the energy once it leaves the plant.

Termis District Energy Management can help you confront those challenges.

Termis District Energy Management is a hydraulic modeling tool, which simulates flow, pressure and thermal behavior in your distribution network.

Unlike other tools, Termis District Energy Management uses real-time data to analyse and track the current situation. This enables operators to make better and smarter decisions and to optimize production and enhance your economic performance.

Termis District Energy Management integrates easily and cost effectively with any set of open applications, and is supported by AVEVA’s extensive knowledge and experience in District Energy Management.

District energy utilities typically supplies at a constant temperature into the network over long periods disregarding the daily fluctuations in consumption. Termis District Energy Management Temperature Optimization module optimises the supply temperature, leading to a significant reduction in the loss of energy and consequently, generates considerable savings.
Improved Network Overview

Termis District Energy Management empowers you by providing an effective and comprehensive overview of your entire network and operation.

Real-time SCADA data transforms a Termis District Energy Management model from a static planning tool into a dynamic decision making tool that is integrated into your day-to-day operation with instant, clearly identified benefits and economic advantages.

How does it work?
An intuitive button interface lets you scroll back and forth and obtain data for pressure, flow and thermal conditions at any given time - in the past, in the present, or in the future, anywhere in the network.

Real-time data from the SCADA system is fed into the Termis District Energy Management model. It is possible to combine this with weather forecast data. This lets you predict future consumption – even during periods of changeable or extreme weather conditions.

Termis District Energy Management allows you to view different areas, sections, zones, and even details of the network. You can easily simulate interventions such as supply changes, opening or closing of valves, starting or stopping of pumps and plant, and assess the impact on consumer supply.

The click of a mouse does it all
The user interface can be customized to suit the individual needs and requirements of the many types of users.

All members of the staff have information at their fingertips, ready to provide instant answers to any inquiry.

What Previously Took Months is Now Possible to Finalize Within Hours

Available Data
Model Building
Overview
Engineering
Operation
Optimization
Measurement
SCADA System
GIS / Billing System
Weather Forecast
Termis District Energy Management
Termis District Energy Management - The Intuitive Operating Tool For Managing Your District Energy Network

With Termis District Energy Management software you can unleash the potential of every employee in the utility to serve your customers better.

You can design your network to meet future demands, avoid bottlenecks, and comply with regulations. While optimizing your investment, you are also improving the service, increasing customer satisfaction, and reducing operating costs.

The staff can click on any object in the network to check data such as pressure or temperature at a specific location and can give instant answers to customer inquiries. Alarm set points for all parameters can be configured.

Like automobile GPS navigation, Termis District Energy Management software will immediately warn you of future problems in the network, no matter which turn you take.

District Cooling / Chilled Water networks

The Termis District Energy Management software is equally suited for chilled water networks as it is for district heating. It is modular and focused on covering all the needs for decision support information to manage all kinds of chilled water systems from few buildings connected to one plant up to thousands of buildings served by multiple plants.

The Termis District Energy Management software includes dedicated modules for master planning and feasibility studies as well as for design of chilled water distribution systems and plant capacity.

1. Visual notification of alarms and events. Alarm set points for all parameters can be configured.
2. Quickly toggle between different areas of your network.
3. Quickly toggle between what you want to monitor – pressure, consumption, temperature, energy loss, etc.
4. Bird’s eye view allows for quick maneuvering and overview.
5. Configurable hotkeys
6. Menu access to advanced functionality such as reporting, etc.
7. View data from the past, the present or the future. View slide show.
8. Search for objects in your model.
9. Insert custom objects such as legends to give you the information you need, when you need it.
10. The view of your network is fully flexible, easy to navigate and can present data in any way you like. Point and click to access data from accumulators, substations, valves, etc.
Termis District Energy Management: Software That Fits Your Business, not the Other Way Around

**Consumers**
- Easy access to information
  - Empowered by easy access to information via web
  - Informed about any planned interruptions or irregularities in delivery

**Call Center**
- Increased customer satisfaction
  - Easy access to consumer data and geography improves handling and logging of complaints
  - Display of planned changes, maintenance, etc. provides prompt and accurate information for consumers

**Consultant Specialist**
- The best advice
  - Comprehensive documentation gives a basis for accurate calculation rather than trial and error
  - The correct valves can be closed and optimal pipe dimensioning assessed

**Field Service**
- Always on...
  - Overview of current operational status assists planning and testing
  - Automatic customer notifications saves time

**Engineering and Planning**
- Save time
  - New piping can be accurately dimensioned
  - More effective planning can be achieved in connection with rerouting and service work
  - Optimized contingency planning
  - More accurate consumption planning with intervention simulations to assess impact

**Management**
- Overview and actionable insight
  - Provides the full picture
  - Instant view of supply and return temperatures
  - Better understanding of the network permits more qualified decisions

**Control Room**
- Quick and easy access to data
  - Knowledge is stored in the network
  - At-a-glance overview of current operational status for effective decision making

Add-On Modules for Further Optimization

**Termis District Energy Management** software is the basis for achieving the full overview of your network, but we also offer a number of additional features and modules, which enable you to achieve further savings on both operating costs and capital investments.

**Temperature Optimization Module**
Minimizes the operation costs within the network by automatically advising or adjusting set points for inlet temperatures, while still ensuring that all consumers have at least the minimum guaranteed supply temperature. The accumulated energy in the network as well as changes in consumption and weather conditions are considered, and so are pumping costs and production costs. Regulation of the inlet temperature is done dynamically. Temperature Optimization typically reduces energy loss with a minimum of 10%, and consequently results in tangible ROI as well as reduction in CO$_2$ emission.

**Pump Optimization Module**
Helps you determine how the pumps in a distribution/transmission network should operate at any given time in order to minimize the total pumping and energy costs for the network, while still supplying sufficient energy to consumers. Termis District Energy Management Pump Optimization can result in savings of up to 20% of the pumping costs by combining pump efficiency, energy costs and energy consumption.

**Pressure Optimization Module**
By automatically combining information from the SCADA system and the model, Termis District Energy Management calculates the optimal pressure in the network.

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**Termis District Energy Management** protects your investment
- Uses real-time data
- Easy integration
- Intuitive, easy-to-learn user interface
- Easy conversion from other modeling tools
Termis District Energy Management: Proven Solution, Proven Results

- Improves service and reduces operating costs
- More than 30 years of experience
- Return on investment in less than 18 months
- Reduces energy loss by more than 10%

For more information, visit:
sw.aveva.com/operate-and-optimise/continuous-process/district-energy-management