



# Skalar.pro

# Monitoring and metering in the heating sector

With Skalar.pro you can optimally monitor your district heating network and identify and promptly eliminate inefficiencies.

Thanks to the real-time data acquisition and evaluation, which can even be carried out every second or minute, you always have an overview of important data such as flow and return temperatures and flow rates. An alarm function also automatically sends you an e-mail if critical threshold values are exceeded or undershot, so that you are always up to date.

### In detail

- Data acquisition every second or minute
- Optimisation through the elimination of inefficiencies
- Various added values, e.g. monitoring of temperature spread or alarm in case of pipe breakage



### Reliable data communication at minimum costs

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## Reading of meter data

#### Secure! Flexible! Economical!

Skalar.pro is your platform for IP based reading and transmission of meter data provided by electricity, heat, gas, or water meters.

- Secure communication thanks to VPN technology (OpenVPN/IPsec)
- Use 'push' operation to send data independently and at low costs
- Quick and easy configuration via web-based interface
- Data exchange via LTE, UMTS and GPRS (4G/3G/2G)



# **Recording of grid information**

### Energy monitoring with pro.online

- Reading of consumption data eg flow and return temperatures, volume flow or mass flux – in any intervals and provision of data
- Transmission of data as file (LPEx2/3, MPX, CSV) via FTP/FTPS or email
- Analysis where and when is energy consumed and how much.
  Permanent control of connected consumers improves transparency
- Optimization of energy consumption by identification and elimination of inefficiencies



# Alarms in case of irregularities

#### Evaluation of data with pro.monitor

- Evaluation of vitally important values flow and return temperatures, volume flows, etc
- Detection and localization of irregular grid details with corresponding alert
- Indication of inefficient user behaviour and outdated technology
- Localization of malfunctions and disturbances eg leakage
- Targets:
  - Reducing grid loss
  - Minimizing power consumed by the pump
  - Increasing the share of climate-friendly heat sources