

ENGINEERING
TOMORROW

Danfoss

Energy metering | SonoMeter 30/31

Ultrasonic energy meters suitable for all applications

Robust and versatile heat and cooling energy meters.



DN15-100

Ultrasonic heat and cooling meters from the world's leading heating experts.

sono.danfoss.com

SonoMeter 30/31

Ultrasonic metering with supreme accuracy

The new Danfoss SonoMeters 30 and 31 are compact ultrasonic thermal energy meters specifically designed for heating and cooling applications in residential and district energy systems.

The SonoMeter 30 is a secondary or primary side meter developed to seamlessly measure the heat distributed in the building or in each apartment. SonoMeter 31 is a primary side meter that measures all heat distributed from a district heating company to a building.

Both meter types come with a high variety of metering functions, application features and communication options to meet a broad range of customer requirements.

- ✓ Static metering using ultrasonic technology
- ✓ High accuracy
- ✓ Heating/cooling
- ✓ AMR communication ready



Suitable for radio 'walk-by'
remote meter readings

Less meter replacements and system adaptations will be required lowering the total cost of the meter installations.

Heat meter benefits

Stable, reliable and consistent measurement

SonoMeter 30 and 31 are developed to deliver precision and accuracy over a long working lifetime. Both meters are equipped to measure temperatures up to 130°C, which suits both primary and secondary side heat meter applications. Additionally, the meters are built to manage high system pressure with a flow sensor pressure range from PN 16 to PN 25 increasing operational meter robustness.

To lower the risk of water damage the SonoMeter 30 and 31 have a high IP-class protection with a flow sensor of IP65 for heating and IP67 for cooling as standard. The high class protection not only lowers the replacement rate – it also reduces the cost for damaged meters. For higher accuracy at low flows SonoMeter 30 and 31 have a dynamic range up to 1:250. The higher measurement accuracy secures more accurate billing, also when heat is delivered for domestic hot water preparation.

Other benefits from SonoMeter 30 and 31 include:

- MID class II certified
- Fast flow measurement frequency
- High resistance towards dirt

Flexible metering for lower costs

SonoMeter 30 and 31 are designed to improve flexibility. The meters have removable calculators for easy mounting outside the station or when the mounting plate is dispatched from the flow sensor. This saves both time and additional mounting costs.

To further improve flexibility, the meters have been MID approved for PT500 temperature sensor cables up to 5 meters. A higher range allows flexible installation options and avoids costly heat piping adjustments.

SonoMeter 30 and 31 comes with either 3.6V DC battery or 230V AC main power supply to meet all requirements.

The meter comes as standard with one communication module which can be changed if communication requirements changes.

High product flexibility secures easy meter adaption and less time spend.



Contemporary application technology

SonoMeter 30 as well as 31 are designed from modern application technology to provide:

- Primary and secondary side meters
- One meter to measure heat and cooling
- Glycol option to measure frost protected water
- Various communication options

One energy meter for various applications lowers the cost for thermal energy meter purchases.

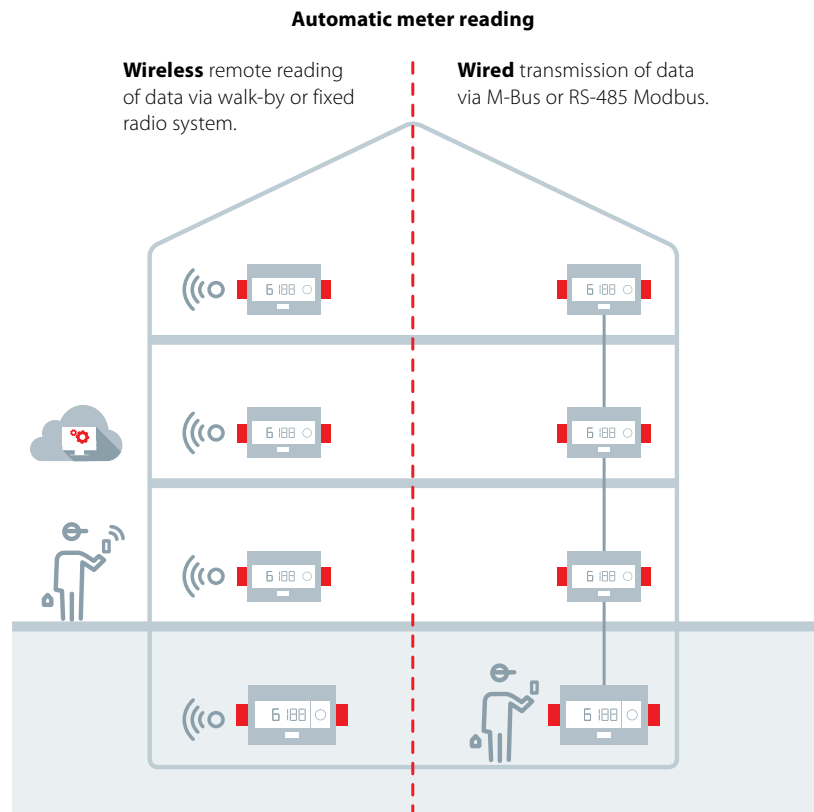


Innovative communication

SonoMeter 30 and 31 combine years of expertise with leading technology. It is designed for commercial accounting of heating and cooling energy and offer a wide range of innovative communication features:

- Two universal pulse inputs for additional water consumption measurement
- M-Bus / Radio OMS / RS485 Modbus communication for reduced data collection time
- 1 x slot for communication modules to improve flexibility for future communication options
- Suitable for radio OMS 'walk by' reading systems

Easing the data reading procedure and making fast data reading possible lowers time spend on data collection and enables detailed energy consumption analysis for future cost optimization.



To learn more about SonoMeter 30 and 31 visit sono.danfoss.com

A global partner with decades of experience

Danfoss has decades of experience in heating technology and some of the world's most advanced R&D facilities. Our production and quality control standards are based on the tough TS16949 standard used in the automotive industry.

With global sales and technical support networks, Danfoss is present in all major markets, ensuring short lead times, efficient logistics and locally based after sales services.

When it comes to meeting the next generation of challenges in heat metering and energy consumption, you can rely on the expertise of Danfoss.

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