

ENGINEERING
TOMORROW

Danfoss

Energy metering | Automatic meter reading

Automatic meter reading for maximum convenience

SonoCollect 110™ data concentrator combined with the SonoEnergy™ platform for flexible metering.



Genuine

plug and control
saves time and effort.



Automatic meter reading

Smart Metering made easy

The SonoCollect 110™ data concentrator removes the need for extensive configuration of multiple meters. Used in conjunction with our SonoEnergy™ software platform, SonoCollect 110™ serves as a consolidated device that meets all the needs of Smart Metering in one compact unit.

Genuine plug and control saves time and effort.



SonoCollect 110™

Complete functionality with integrated design

The new SonoCollect 110™ concentrator from Danfoss has been introduced to make reading Danfoss heat meters easier.

SonoCollect 110™ is a highly compact multifunctional controller. Just four modular units wide, it is the smallest controller on the market that fully meets the requirements of FNN specifications. Because the power supply unit is built-in, you can connect SonoCollect 110™ directly to the mains voltage, eliminating inconvenient

battery fallouts. This frees up space without increasing installation costs.

As a gateway for Smart Metering, SonoCollect 110™ comes with a standardized M-Bus interface. This supports up to 80 slaves and provides four pulse inputs (S0) to connect additional meters. The wireless M-Bus also features a new technology that is compliant with the OMS communication standard. This means you can use SonoCollect 110™ to capture consumption data in all

existing and future infrastructures.

In addition, this innovative device provides an RS-232/485 serial interface for connecting other sensing devices or displays.

Ease of installation coupled with communication flexibility saves time in installation, operation and maintenance.

SonoEnergy™

New possibilities with a smart energy platform

SonoEnergy™ is a smart energy software platform that supports the holistic integration of data, business processes and technologies. It offers users an intuitive interface for reading, storing and analysing metering data. SonoEnergy™ is designed on a modular principle. This makes it possible to start small and add functionalities as the user's commercial, process and technical requirements evolve.

SonoEnergy™ key features

- Proven smart metering and energy management applications
- Supports multiple readout technologies for data collection
- Storage and processing of multiple data streams in one system
- Scalable, modern, virtualized and compliant system design that meets all security requirements
- Can be used as a stand-alone device or integrated into an existing system

- Offered as a cloud solution
- Standard interfaces and protocols can be expanded via plug-ins
- GUI control panel for configuration and monitoring

SonoEnergy™ enables the provision of entire service concepts or single end-user products in the field of Smart Metering, energy management and more.

The software platform offers new possibilities for the utility sector by enabling energy suppliers, grid operators and energy service providers to create innovative and attractive services, such as combining Smart Metering and smart domestic functionality.

Easy data handling saves time in daily meter operations.



- ✓ Reduces investment costs and simplifies scalability
- ✓ Intuitive user interface reduces training and operating costs
- ✓ Implementation from small pilots to large-scale rollouts
- ✓ Easy adaptation to new requirements and changing business goals

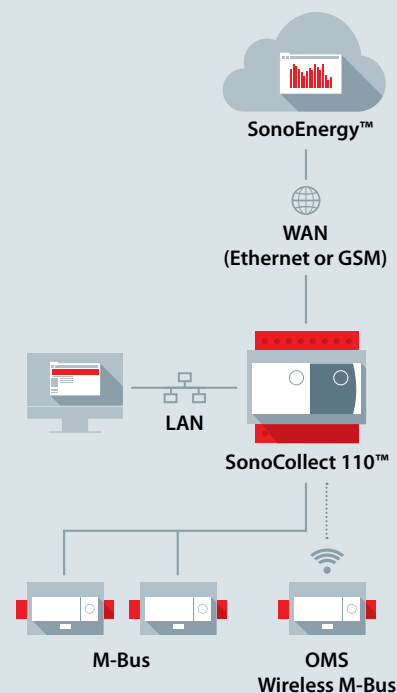
Connection to SonoEnergy™

Administration access made easy

SonoCollect 110™ can be connected to SonoEnergy™ via either an Ethernet or GSM interface. It also supports both CSV, XML and SML, enabling connection to back-end systems as well as offering maximum flexibility when connecting to external systems.

Via a dedicated website, customers can access up-to-date energy consumption information at any time using any standard browser, or independent of internet access via the offline front-end.

Connection and access flexibility makes daily administration easy and less time consuming.



Next-generation heat metering from a **reliable** global partner

Danfoss has decades of experience in heating technology and some of the world's most advanced R&D facilities. Our commitment to innovation and optimization is perfectly expressed in our latest metering solutions.

Used in conjunction with SonoCollect™ and the SonoEnergy™ software platform, the new Danfoss heat meters brings a cutting edge metering application to the industry. By enabling Smart Metering and other innovative offerings, this unique technology platform provides measurable benefits and advantages along the entire metering value chain – for service providers and end-users alike.

Choosing Danfoss also means benefiting from a global sales and technical support network that ensures short lead times, efficient logistics and locally based after-sales service – wherever you are in the world.

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

SonoSelect™/SonoSafe™ Ultrasonic heat meters

- Next generation ultrasonic heat meter
- Easy and flexible installation with no in-/outlet restrictions (MID supported)
- Continuous high-performance measurement
- Meter validation without dismantling the heat meter
- Best-in-class battery secures long operational life
- Can measure domestic hot water consumption
- Genuine diagnostics



To find out more about SonoCollect™, SonoEnergy™ and the SonoSelect™/SonoSafe™ heat meters, visit sono.danfoss.com

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