SIEMENS

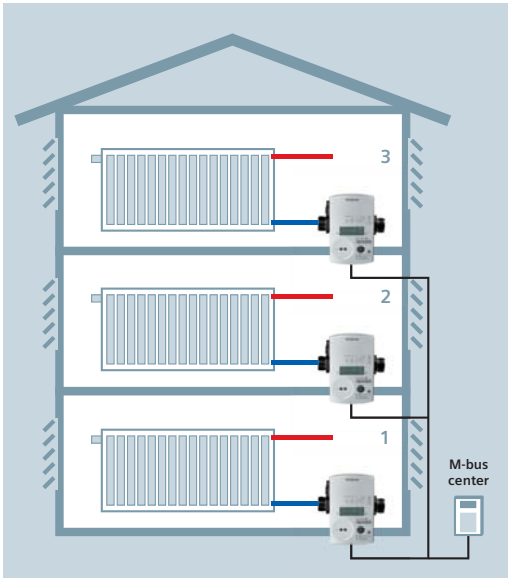
The versatile meters – innovativ and flexible

Consumption data acquisition for every application

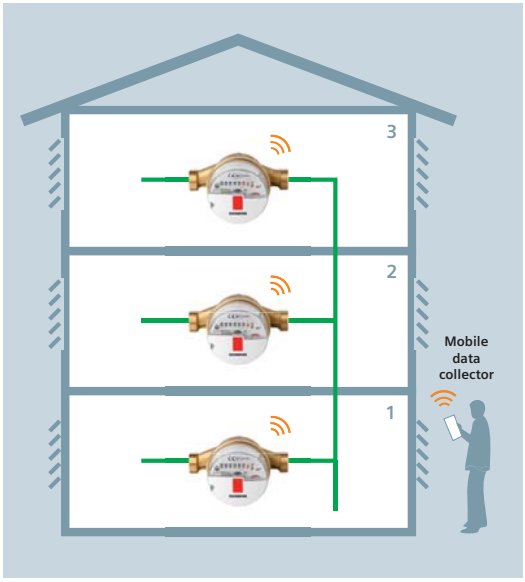
Answers for infrastructure.

Meters from Siemens – reliable, flexible and secure

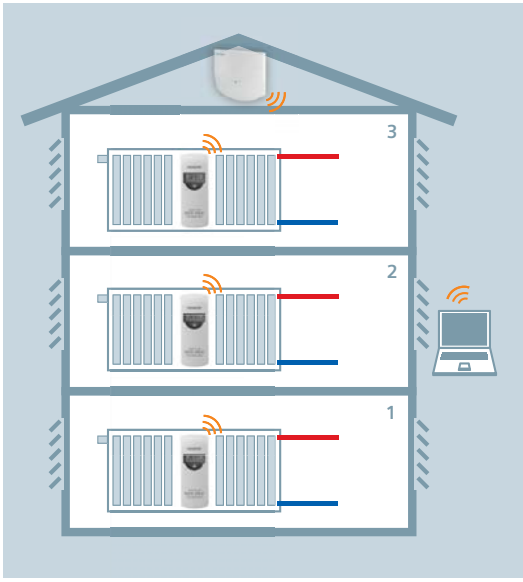
Those who want to save money need to have a solid grip on their consumption data and only pay for what they actually use. The meters precisely measure the consumed water and heat and cooling energy. They also enable values to be read on location or remotely via radio frequency or network connections. This is ideal for residential areas, office buildings, large real-estate developments and individual apartments. The meters are extremely precise and very dependable – and they have proven their effectiveness in thousands of applications. Matching accessories ensure that everything fits together optimally and smoothly for every application.



M-bus: data collection via the M-bus center using a two-wire bus



Walk by: radio retrieval with a mobile data collector



AMR: automatic collection and retrieval using a network node and radio frequency

Billing – transparent and timely

Siemens delivers innovative systems for remote retrieval of consumption data. These systems are ideal for new buildings as well as for modernizations.

One for all

M-bus is the standard bus for counters. Via this polarity-proof, two-wire bus, consumption data for all connected meters is retrieved. M-bus is used primarily where the meters are distributed over a large area in a system, for example in district heating networks.

Data retrieval in passing

In the walk-by system, data is retrieved using radio waves in passing – simple, quick and dependable. In an area of the building open to the public, or even from outside the building, the reader starts remote access using a mobile device. After a plausibility check, data is sent via Bluetooth to the reader's laptop or PDA.

Wireless data transfer

With the automatic meter reading system (AMR), data can be retrieved wirelessly. The network node uses radio waves within the building or the property to collect data from the registered counters. The data saved in the network node can only be retrieved via M-bus, Ethernet or GSM (mobile phone network).

The freedom you need

All three systems have in common that the consumption values can be accessed when the billing entity chooses – without the need for laborious appointment making and without additional administrative effort. Customers receive a bill that precisely reflects their consumption levels. At the same time, all systems can be adjusted and expanded flexibly – whenever a building is modified or the use of a room is changed.

Heat cost allocator WHE5

Mechanical water meter WFW30

Ultrasonic heat and cooling energy meter WSM5/WSB5

Service-friendly and economical meters

Electronic heat cost allocator

WHE5 is an excellent and economical solution for apartment buildings, office and administrative buildings whose heating costs are divided up among several users depending on their actual consumption. For analysis a large database of heat transfer values (kc values) is available for different radiators.

Meters for drinking water facilities

WKW30/WFK30 measures consumption of cold or warm water at nominal flows of 0.6 to 2.5 m³/h. All water meters are equipped with modules for data retrieval using AMR or walk by, and they conform to MID.

Heat and cooling energy meters

The ultrasonic heating and cooling energy meters WSM5/WSB5 and 2WR6 are appropriate for nominal flows of 0.6 to 2.5 m³/h. The meters are approved for water temperatures from up to 90° C respectively 105° C.

The impeller wheel heat meter WFM and the combined heat and cooling energy meter WFN are electronic, fully dry running meters for nominal flows of 0.6 to 2.5 m³/h. The impeller wheel heat meter achieves MID class 3.

As a result of their compact design, all meters are ideal for central heating facilities in which the heat energy is distributed to several individual consumers.

The ultrasonic heat meter UH50 has a nominal flow of 0.6 to 60 m³/h. It was developed for fully electronic heat measurement at building transfer stations in district and local heating networks, and for central heating in residential buildings. It can be used to measure heat and cooling energy.

With ultrasonic meters, two ultrasonic converters send impulses into and against the direction of flow. The difference between the signal times is used to calculate the flow speed, and from it the flow rate and volume are determined. Ultrasonic meters do not require any mechanical parts and they conform to MID class 2.

Wide range for every application

Versatile
For every application we have just the meter you need, including a broad range of accessories for installation. The meters feature standard interfaces such as M-bus and pulse output for simple and fast integration in the higher-level building automation systems and for implementation of a complete consumption data network. Everything from a single source – and everything fits together optimally, also third-party systems.

Comfortable
All meters are equipped with a display or a counting mechanism. As such, residents can keep an eye on their consumption data at all times. Remote meter reading means that visits to the individual parties, such as to tenants in an apartment building, are no longer necessary. A data collector, for example an M-bus center or a network node, gathers all consumption figures. Thanks to the different read-out variants, the meters can be operated in autonomous billing systems, or they can be integrated in the home automation system Synco™ living or in the building automation and control system Desigo™ for offices and administrative buildings.

Dependable
Proven components and modern technology ensure high precision, dependability and longevity. The meters fulfill requirements set down in EN 1434 and conform to MID (class 2 or 3). They boast a low-maintenance design and a lifespan of over 15 years, depending on the power supply. Attempts to manipulate the heat cost allocators are automatically recognized and registered by the meters. All meters are protected by a verification seal.

Future-proof
For all uses and for all applications in buildings, Siemens offers the right products and systems. Everything from a single source – thanks to a unique portfolio, application flexibility and excellent quality. The meters are also equipped to fulfill tomorrow's requirements, since Siemens plays an important role in developing and driving international standards.

Highlights
- **Versatile** – the meters are coordinated exactly to the respective use, whether for hot or cold water, for heating or cooling energy
- **Flexible** – different communication modules enable seamless integration in higher-level systems
- **Dependable** – highest quality and Siemens' decades of experience in the product business. This guarantees that devices have a low failure rate
- **Precise** – highest precision and longevity through ultrasonic technology and the absence of moving parts
- **Simple** – easy to use, easy to integrate

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Answers for infrastructure.

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

"We are the trusted technology partner for energy-efficient, safe and secure buildings and infrastructure."

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