



Unequaled quality and precision

Superstatic heat meters from Sontex:
flexible and reliable.

Sontex

Superstatic is top of its class

Superstatic heat and cooling meters are available for many flow rates. They are used in building technology and automation and in heating networks.

Superstatic meters have been used countless times for heat metering and are unrivalled in cooling applications. They work with flow-rate and temperature sensors that inform the relevant integrator of volume and temperature differences. They can be fitted horizontally or vertically and used in hot or cold pipe

configurations. A wide range of communication modules is available.

Superstatic meters are used with over 75 different cooling liquids, which can be extended upon request. Uneven blends have no effect on measurement precision.



Reliability

Since Superstatic heating meters have no moving parts, their measurement components are not susceptible to ageing. They work ultra precisely and do not need recalibrating for more than 10 years.



Certification

Superstatic meters meet the requirements of European guideline MID-2014/32/EU and offer unequalled precision. They are also certified by PTB Germany for cooling applications.



Rugged

Since the devices are impervious to contamination and magnetite deposits, they are suitable for challenging applications. Small air bubbles also have no effect on measurement precision.



Product range

Sontex offers two Superstatic product ranges: the 440 range for the high-end sector, and the 749 and 789 range of compact heat meters. These can be used in a wide spectrum of installations. Each range has an identical integrator, which reduces training to an absolute minimum.



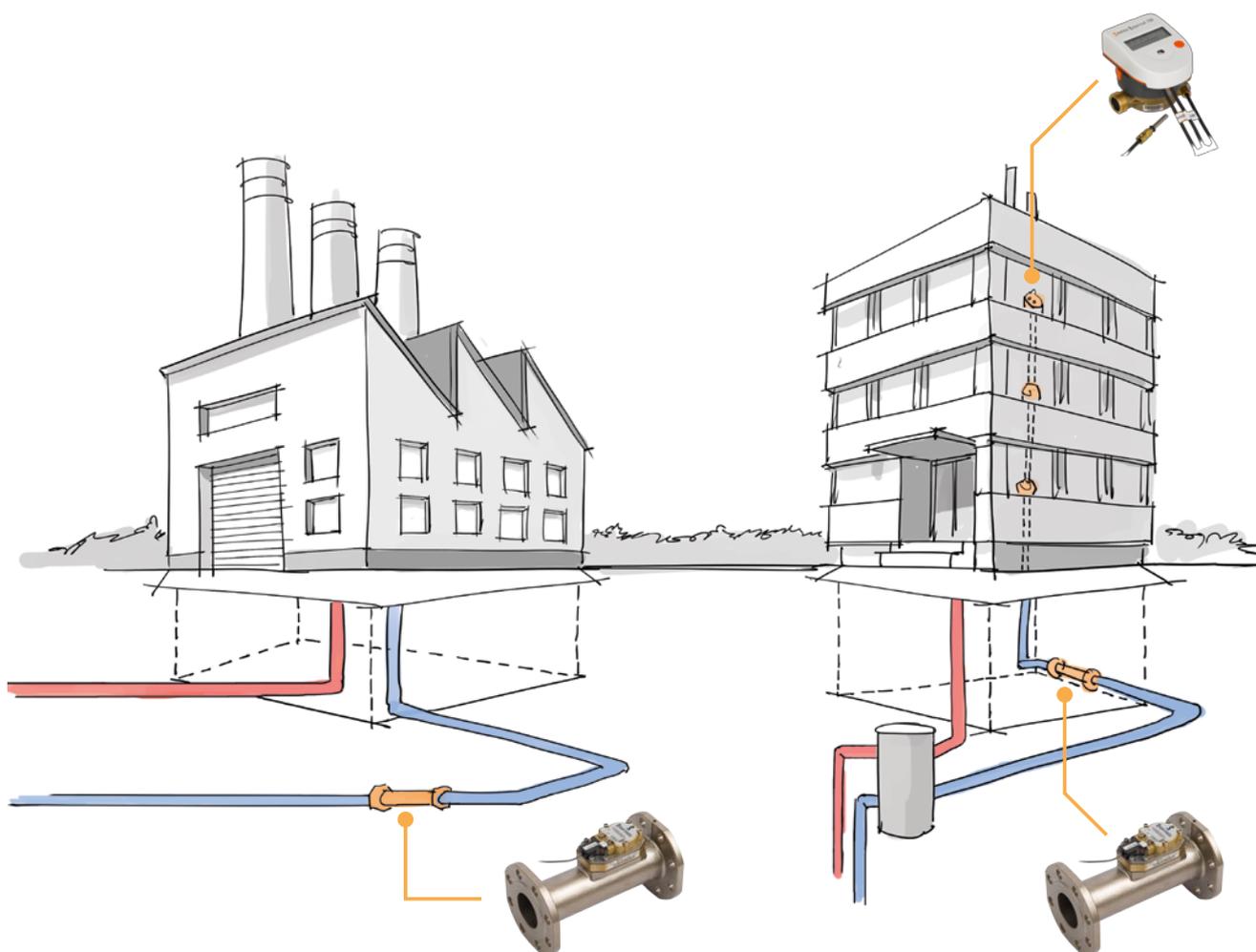
Energy management

Contrary to ultrasound meters, a Superstatic meter measures the flow constantly. To extend battery life, heat quantities are only refreshed as needed.



Long lifespan

With their static measurement process involving no moving parts, Superstatic heat meters are practically free of wear, are maintenance-free and enjoy a long lifespan.



Piezoelectric sensor

Superstatic heat meters work by fluidic oscillation: the specific geometry within the meter creates a stable oscillation with a frequency directly proportional to the flow rate. The piezoelectric sensor measures this frequency based on the differences in pressure, thus calculating the quantity of water.

Developed over 50 years ago by NASA, this principle was improved to market maturity by Sontex and is used today in many hundreds of thousands of heat meters worldwide. One of its advantages is that it can also be used for large pipe diameters. Superstatic meters comply with the requirements of the standard EN1434 class 2.

The high-end solution

Relevant data for successful integration in building management systems – a multifunctional calculator is already integrated into the Superstatic 440 and is available as an integrator for Supercal 531.

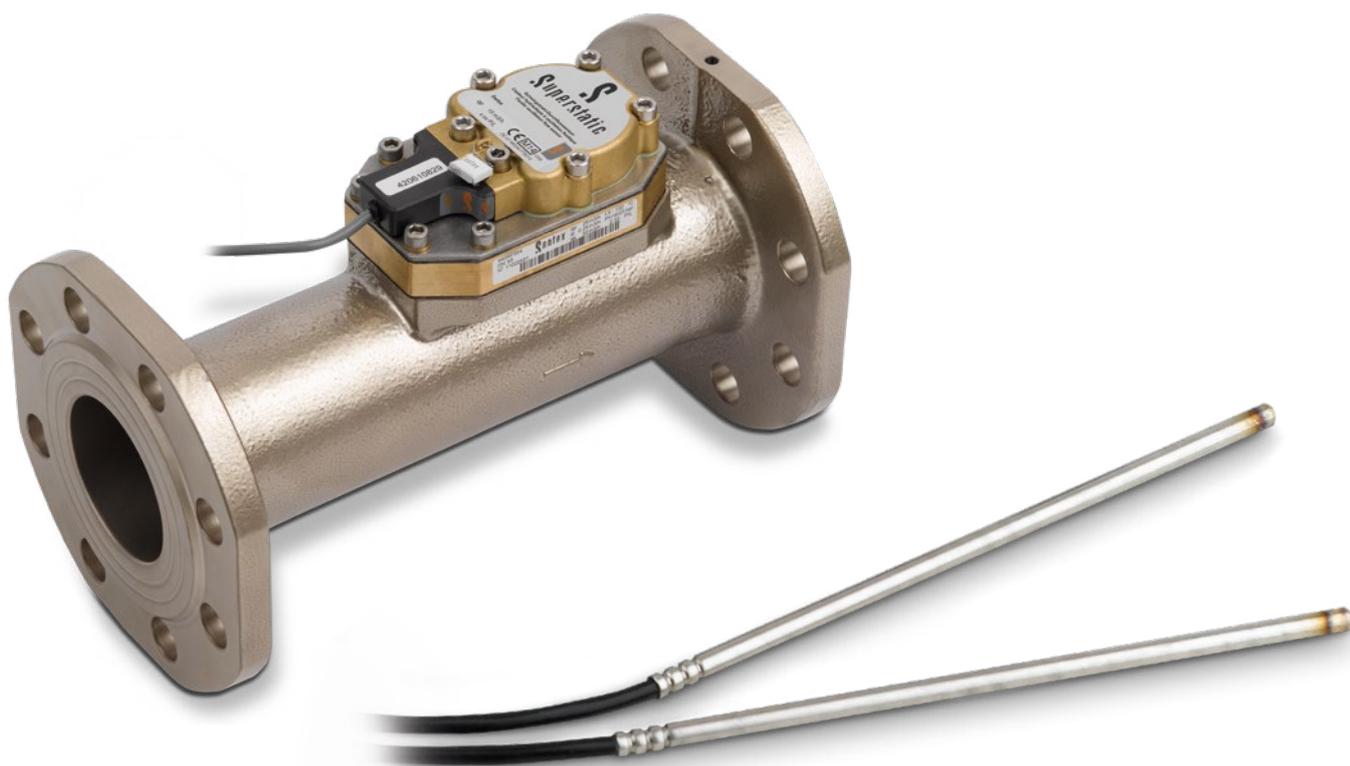
Superstatic 440

The Superstatic 440 meter is the high-end solution for large installations such as shopping centres, large residential complexes or heating networks, where very different sizes are required. It is a fluidic oscillation heat and cooling meter for flow rates from 1.5 to 1,500 m³/h. High-quality, corrosion-resistant materials – brass, spheroidal cast iron or stainless steel – guarantee measurement stability and reliability over many calibration periods. Irrespective of nominal size, the Superstatic 440 measuring head is always identical and

is the only part that is changed for each new calibration period. This greatly simplifies planning and the heavy main element can remain in the pipe system.

Does your heat pump work efficiently? A special version is available to measure the efficiency and performance of heat pumps: the Superstatic 470 SPF heat pump meter.

The temperature sensors are also manufactured by Sontex. They are available in many versions and are MID certified.



The ultra-flexible integrator for high-end solutions

With its many communication interfaces that meet all customer requirements, Supercal 531 integrators can also be used with applications that need alternative volume measurement parts.



Supercal 531

Multifunctional Supercal 531 integrators are a success thanks to their modular concept. The integrator offers a choice of M-Bus, radio or SMS modules and can be upgraded with additional communication modules such as e.g. BACnet, ModBus and LON. These can be added later without losing calibration. It is also possible to replace the metrological part of the integrator without removing the main casing.

This optimises replacement times and cuts costs for mandatory meter replacement.

The operating principle is clear and user-friendly. It allows the collection, read-out and analysis of a wide range of data. A data-logger is also available on request.

Supplied with a battery as standard, other supply modules are available. The device automatically recognises the power supply installed.

The powerful compacts

The Sontex range of heat meters has a solution for almost every application. Both Superstatic fluidic oscillation heat meters and Supercal mechanical devices feature unparalleled reliability and precision.



Superstatic 789

The latest member of the Superstatic family is a logical development of the fluidic oscillation measurement principle. Made of high-tech composite, it is light and compact. Superstatic 789 meters are robust, extremely precise and flexible in use.

The new flow rate sensor, which is also suitable for glycol mixtures, is based on ultra-modern piezo-technology. It is equipped with a removable multifunction integrator and a choice of communication options such as wM-Bus, SONTEX radio and M-Bus to cover several applications. Also suitable for easy integration into heating networks or building management systems.

Superstatic 749

The Superstatic 749 fluidic oscillation meter is very compact and fits seamlessly into the Superstatic product portfolio. It is designed for heat and cooling applications when space constraints are tight. Superstatic 749 meters have a removable compact integrator with communication modules and is easily integrated into heating networks or building management systems.

The frequency of fluidic oscillation is measured via a piezoelectric sensor.



Supercal 739

The Supercal 739 compact mechanical heat meters are available as single-jet flow sensors or coaxial multi-jet flow sensors with various connections. Suitable for G2B or M77x1.5 connections, they meet the requirements of EN standard 1434 class 3 and are certified either for heat or cooling applications.

They are noted for their excellent price-performance ratio and are the reference in heat metering in many countries.





*«A wide range of products for very different requirements
matched by great uniformity and clever systematics –
Thanks to Superstatic we are a step ahead in the market»*

Patrick Grichting, Head of R&D