

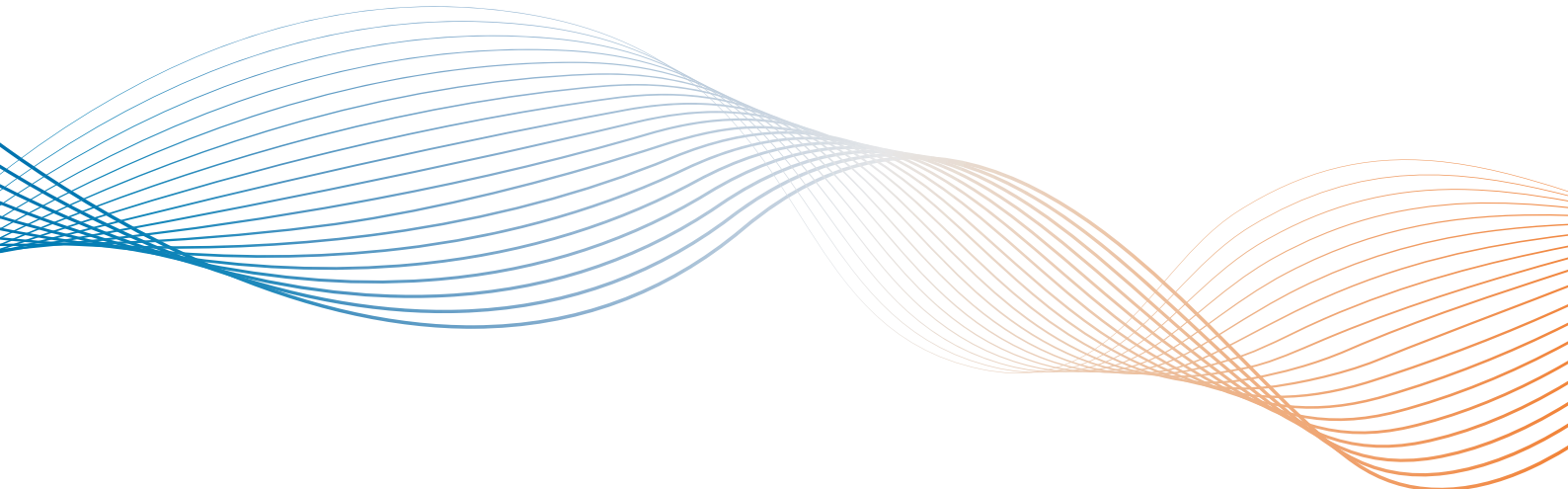


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Electronic heat cost allocators

WHE30 and WHE37



 basic

 opto

 M-Bus

 walk-by

 AMR

Top quality is our standard

Electronic heat cost allocators

WHE30 and WHE37

Recording of consumption data with electronic heat cost allocators from QUNDIS

Electronic heat cost allocators are devices which are mounted to a radiator, and can measure the heat output and can save the data recorded. A distinction is made between one-sensor devices (WHExx) and two-sensor heat cost allocators (WHExxZ). One-sensor devices record the radiator temperature and assume a fixed room temperature for consumption calculation. In contrast, two-sensor devices record both the radiator and the room temperatures. Both device types can be used with standard heating systems; with low-temperature heating systems two-sensor devices are prescribed or more suitable. Both device types can display and save different values, whether these are the cumulative value on a key date or the current value, and both have an error display.

In the case of vertical heating system piping, heat cost allocation is only possible through heat cost allocators, in the case of horizontal piping, heat meters may be able to be used depending on the system type.

Alongside advanced measuring technology that has proved its worth millions of times over, we can fall back on one of the largest databases with heat transfer values (k_c -values) for almost any type of radiator available without which evaluation of the measured results would not be possible. In addition, QUNDIS devices are equipped with powerful lithium batteries that make reliable measurements possible over a period of 10 years.

Two systems for easy entry

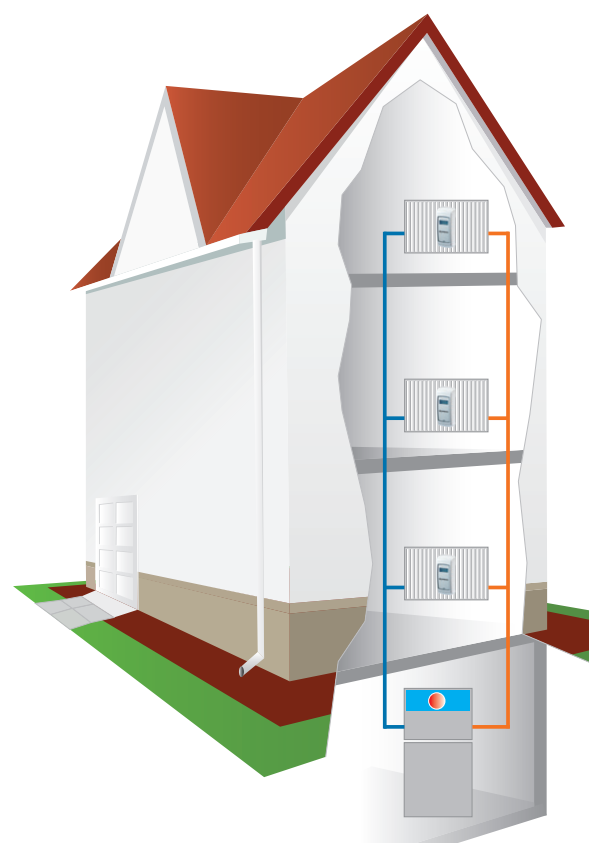
Our electronic heat cost distributors WHE30 and WHE37 get you off to an optimum start to modern and reliable consumption data recording with QUNDIS systems. All devices can provide key date displays. This key date display also gives tenants the possibility of checking their exact annual consumption on the device when they receive their heating cost bill.

Series WHE30 – Q basic

The devices of the WHE30 series are modules belonging to the **Q basic** system which are readout visually, and the measuring results of which are noted manually. They are especially suited to tasks or systems that do not require complex data evaluations or particularly fast readout. Buildings that fall into this category and do not require a great deal of investment are perfectly equipped with these devices.

Series WHE37 – Q opto

The WHE37 series is equipped with an optical close-range interface (IrDA) through which the measuring values can be read out using a corresponding device. The meter-reading process however is simplified by the electronic readout of devices in the flat and optimisation regarding error display and data accuracy. In addition, the values of the last 15 months can be read out, which makes additional intermediate meter-reading if there is a change in tenant a thing of the past.

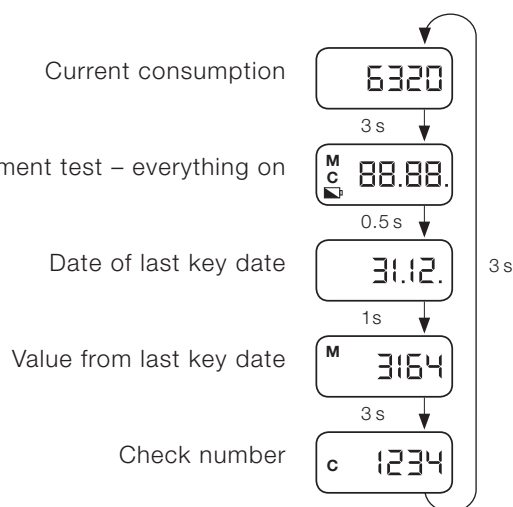




Technical data

Dimensions W/H/D	40/76.5/27.5 mm
Measuring principle	Directly recording decentralised measuring system of the heat radiated from the radiator. For recording measuring values using one temperature sensor (radiator temperature) or two temperature sensors (radiator and ambient temperature)
Voltage supply	3V lithium battery
Lifetime	10 years
Execution	Acc. to DIN EN 834
Type approval	Acc. to HKVO No. C3.03.1999 (one-sensor) C3.01.2001 (two-sensor, IrDA)
Device variants	Compact and fine sensor version One-sensor or two-sensor version
Installation material	For numerous radiator types
One-sensor measuring system	Area of application 55 °C t_{min} / 105 °C t_{max}
Two-sensor measuring system	Area of application Unit scale $t_{min} = 48$ °C to $t_{max} = 105$ °C Product scale $t_{min} = 35$ °C to $t_{max} = 105$ °C
Special features	- Key date can be programmed - Internal cumulated overall memory - Check number display - Error detection and error display - WHE37 with IrDA interface and 15 monthly values can be read out via interface

LCD display



QUNDiS – Always the right choice

As a company that has defined customer orientation as a clear strategic focus, we rely on maximum openness, dependability and user friendliness in all areas.

- ~ Complete downward compatibility of all new devices at “old” installation points
- ~ Open system architecture with standardised interfaces makes the combination with or extension by different additional services possible.
- ~ Comprehensive database with heat transfer values (k_c -values) for almost all types of radiator available
- ~ Own certified measuring and testing equipment (absorber hall, State Testing Centre for Heat and Water Meters, fully electronic quality test)
- ~ Both fully automated and flexible semi-automated production for top product quality

The QUNDiS product family

Universal functionality covering all of our systems and products spells an enormous advantage for users. Should application conditions change or the customer have new requirements, the system can be easily changed without having to leave the QUNDiS family. A change or an upgrade from one system to another is often possible with very simple means, which also makes the changeover to current technologies such as radio and smart metering easier.

As a company conscious of its responsibilities and a member of all the relevant bodies and workgroups on the subjects of sub-metering, smart metering and environmental protection, our developments of future-proof technologies are always an indication of the varied ways energy can be saved and resources protected.