



Compact heat meter

G20 / G21



Qbasic

Qopto

QM-Bus

Qwalk-by*

QAMR*

*with respective add-on module

We combine economy with flexibility

Compact heat meter G20 / G21

The heat meter family from QUNDIS

Electronic heat meters are used for the strand-by-strand recording of heating consumption in heating systems with central heat supply. These measuring devices calculate the consumption of heating energy using the volume flow of the heating-circuit water and the difference in temperature between feed and return flow. QUNDIS heat meters are available as screw-type or measuring capsule meters in different design sizes, so that almost all standard systems can be equipped.

The series G20 / G21 is designed as a screw-type meter, in other words it is screwed directly to the pipe system. On account of the compact design, straightforward operation and wide area of application, the devices are suitable both for under floor heating and for horizontal piped radiator systems.

Convincing advantages

The compact heat meter family in the series G20 / G21 meets all the requirements of modern metering and also provides numerous functions that make the device suitable for universal use.

- ~ In addition to their versatile communication ability, the other outstanding feature of the devices is their high level of metering accuracy. In addition it is possible to store and display cumulated values on a freely choosable due date
- ~ The meter-reading process is made easier by the possibilities offered by optic and electronic readout with the **Q opto**, **Q M-Bus** and radio-controlled systems **Q AMR** and **Q walk-by**, and optimised in terms of error detection and data transmission security.
- ~ Thanks to their compact size, the meters can be installed even in an 80-size distribution box without any problems. The computer can be turned through 270° so that the display can always be read out even in cramped conditions
- ~ Clear pictograms and large numbers ensure meter reading can be carried out quickly and easily
- ~ In addition to the usual measuring values, the G21 series can also be used for combined heat and cold metering
- ~ An optional remote display module makes readout possible even in poorly accessible places
- ~ On-site re-programming of the due date can easily be performed using a programming key (without PC / PDA)

G20 / G21 – One series, all systems

The screw-type heat meters of the series G20 / G21 are **Q opto** systems delivered as standard, i.e. they are readout and parameterised via an optical close-range interface. This means that they are also suitable for use in a **Q basic** system, of course. Since they can always be retrofitted with external modules, the heat meters can also be used in other systems such as **Q walk-by**, **Q AMR** or **Q M-Bus** without any problems. Integrated modules also allow these heat meters to be equipped with the required communication technology – M-Bus or impulse output – from the factory.

The following modules are currently available for the G20 / G21 series:

- ~ Impulse output module with and without error output for connection to the impulse collector
- ~ Radio modules for integration of the heat meters in radio systems such as **Q walk-by** and **Q AMR** (planned from spring 2010)
- ~ **Q M-Bus** module for connection with M-Bus host systems and level converters
- ~ RS 232 module for the direct connection of the heat meter to a PC

Optional add-on modules for different applications



Technical data

Device type	G20/G21	G20/G21	G20/G21
Nominal flow Qn	0.6 m³/h	1.5 m³/h	2.5 m³/h
Installation position	horizontal/ vertical	horizontal/ vertical	horizontal/ vertical
Installed length	110 mm	110 mm	130 mm
Connection thread on meter	G 3/4"	G 3/4"	G 1"
Temperature range	5–90 °C	5–90 °C	5–90 °C
Maximum temperature (for brief periods)	110 °C	110 °C	110 °C
Cable length of temperature sensor	1.5 (opt. 3.0) m	1.5 (opt. 3.0) m	1.5 (opt. 3.0) m
Energy supply	Lithium battery	Lithium battery	Lithium battery
Service life	> 6 (opt. 10) years	> 6 (opt. 10) years	> 6 (opt. 10) years
Protection rating	IP 54	IP 54	IP 54
Display	7-digit LCD	7-digit LCD	7-digit LCD
Energy display	kWh (opt. MWh) MJ (opt. GJ)	kWh (opt. MWh) MJ (opt. GJ)	kWh (opt. MWh) MJ (opt. GJ)

Display test (all segments on)



This symbol indicates that hydraulic sensor volume impulses are received by the electronics, i.e. as long as sensor volume impulses are sent, the symbol rotates in 45° steps.

This bar indicates the current user-selected display level. Level 0 (no symbol) shows the consumption data, the levels 1 to 4 show service, configuration and further consumption data.

This arrows shows that no energy is currently being recorded via the heat meter, i.e. it is an optical code for the unit resting phase (no difference in temperature and/ or no flow).

QUNDIS – Always the right choice

As a company with a clear strategic focus on customer orientation, we rely on maximum openness, reliability and user friendliness in all areas.

- ~ Open system architecture with standardised interfaces enables different additional services in combination or as an extension
- ~ 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 manifold ways of saving energy and protecting resources.



QUNDIS GmbH

Sondershäuser Landstraße 27
99974 Mühlhausen / Germany
Tel.: +49 (0) 3601 46 83-0
Fax: +49 (0) 3601 46 83-175
e-mail: info@qundis.com

Bahnhofstraße 10
78112 St. Georgen / Germany
Tel.: +49 (0) 7724 93 89-0
Fax: +49 (0) 7724 93 89-310
e-mail: info@qundis.com

www.qundis.com

