



A passion for precision –
Systematic data recording



QUNDIS™

Our products can be found
in almost eight million homes
in more than 30 countries.

Market leaders by tradition and responsibility.

QUNDIS is well known as a leading supplier of metering devices and readout systems in the field of consumption-based billing of water and heating costs. For almost 30 years the QUNDIS group of companies has been highly appreciated in Germany and Europe as an efficient and reliable supplier of cutting-edge products for metering services in the housing and energy industries.

QUNDIS was created from a merger between two companies with a rich tradition: QVEDIS (previously SIEMENS) and KUNDO SystemTechnik. Today QUNDIS products can be found in almost eight million homes in more than 30 countries.

Domestic and international cooperations, including those with IBM and the University of Maribor in

Slovenia, help us to permanently renew our product range and keep it at the highest technological level. With the support of our affiliate company SMARVIS we design, develop and market intelligent system solutions for the housing industry (integrated smart metering).

QUNDIS also assumes responsibility for the environment. Our company is a partner to the environmental initiative “Plant for the Planet”. All our company’s operations are geared towards sustainability. This means the responsible treatment of resources, pollutant-free products and processes, continuous energy savings as well as EMAS-tested environmental and quality management and both ISO 9001 and 14001 certification.

Quality has a name:

QUNDIS – everything ‘Made in Germany’, from development to production!

On state-of-the-art production lines at its German headquarters in Erfurt, QUNDIS manufactures an annual three million electronic heat cost allocators and over 200,000 heat meters – as well as water meters, readout systems and communication modules. We are leaders in the application of the latest metering methods and low-power technologies.


Our know-how, our own research and development work and the commitment and expertise of our 300 QUNDIS experts form the foundation for our market position as a technology leader in consumption data management.

Rock-solid quality standards: products and system solutions made by QUNDIS have the purpose of contributing to the precise measurement and analysis of energy consumption, and ultimately to promoting a responsible approach to increasingly scarce resources.

Operations
in over **30** countries

 Almost **8 million**
homes equipped

 **90 million**
euros turnover/year

 **10 per cent**
average annual growth

 **300** employees



 Production locations  Branches  Development locations



We offer the right product solution
for every building and every
individual case.

With us individuality is the norm.

QUNDIS systems enable requirements-based consumption data management, as well as the simple and comprehensive integration of additional services. We offer the right product solution for every building and every individual case.

Standardised interfaces and open-system architecture ensure maximum flexibility and independence. The integration of OMS compatible third-party

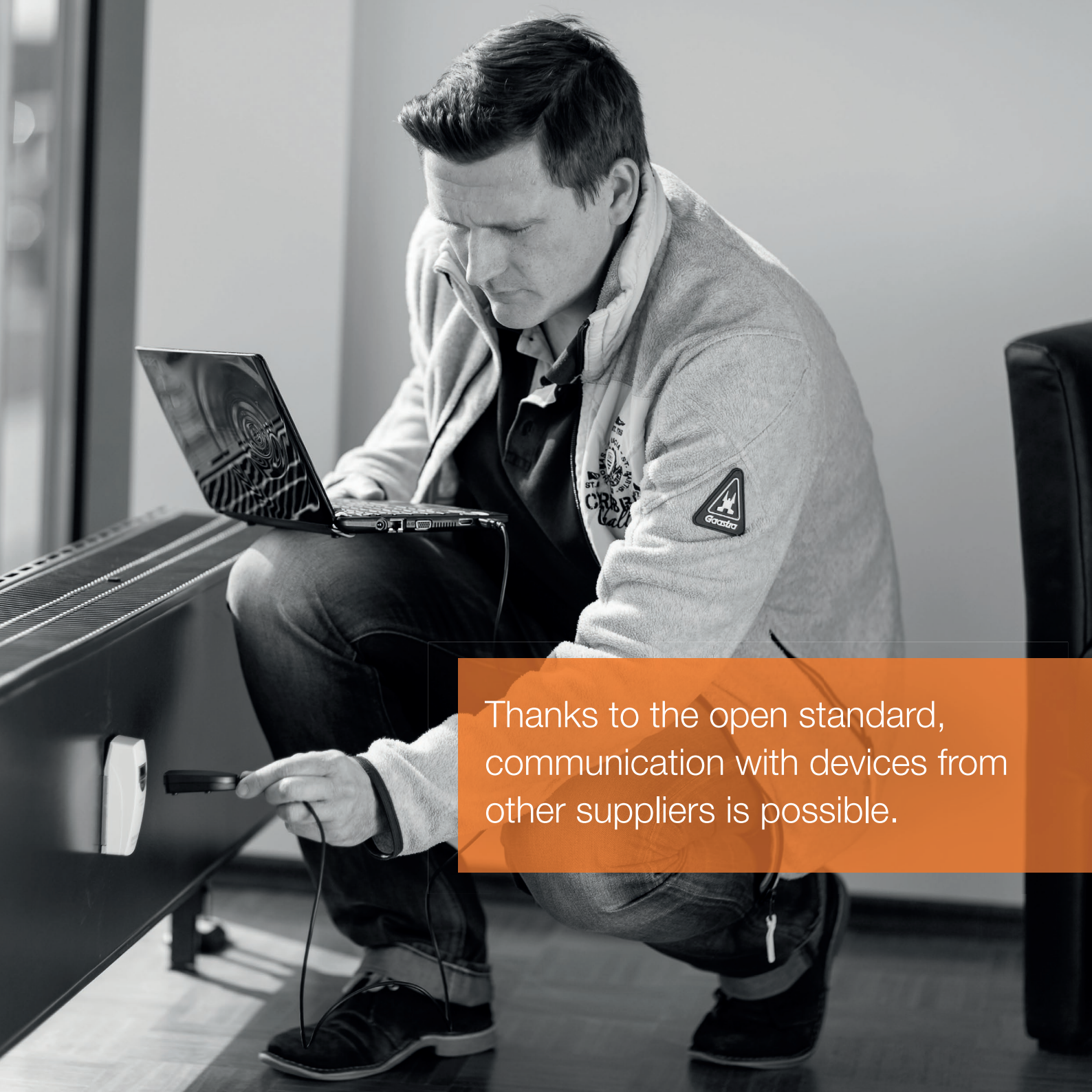
meters is possible by using the QUNDIS direct gateway (Q gateway direct).

For even more convenience, our radio systems make the consumption data available via the QUNDIS Smart Metering Platform (Q SMP). This powerful hosting solution simplifies utility cost billing and supports both analysis and monitoring.

QUNDIS systems – the “modular system” principle interpreted in a modern way.

Each of the five system solutions from QUNDIS comprise different device types (heat cost allocators, heat meters, water meters, smoke alarms, modules, network nodes and gateways). These all have a high de-

gree of compatibility. At the same time, the open standard (OMS) enables the radio devices to communicate with devices from other suppliers. System devices from QUNDIS are fully downward compatible.



Thanks to the open standard, communication with devices from other suppliers is possible.



Q AMR

- › automated remote meter reading of systems of any size thanks to a high-end system solution
- › secure and reliable provision of consumption values via the Smart Metering Platform Q SMP using a mobile network or broadband cable
- › simple creation of heating and utility cost bills as well as statistics and consumption history for the housing industry



Q walk-by

- › no need to physically enter apartments or offices
- › easy, fast and safe readouts in publicly accessible areas, in the case of smaller systems even outside the building
- › consumption values transmitted to mobile data collectors at defined times
- › convenient data export within the billing programme



Q M-Bus

- › the Europe-wide industry standard for wired networking of devices, sensors and actuators
- › reliable coupling of different devices
- › optional extension by means of the Q AMR radio system to the radio metering devices of the Q AMR system, e.g. heat cost allocators



Q opto

- › personal contact with tenants possible, thanks to simplified, electronic reading process
- › direct comparison of current consumption values with the previous period



Q basic

- › ideal for simple and time-uncritical data reading and evaluation
- › direct, individual and manual reading in the home
- › manual recording of the metering results by the metering service



Heat cost allocator
Qcaloric



Heat meter **Qheat**
with radio add-on
module



Ultrasonic heat meter
Qheat US with radio
module



Ultrasonic heat meter
Qheat US



Electronic water
meter **Qwater**



Mechanical water
meter **Qwater** and
radio add-on module



Impulse adapter
for integration into
the AMR system



Smoke alarm
Qsmoke



Gateways **Qgateway +**
Qgateway direct,
Network node **Qnode**



Heat cost allocator
Qcaloric



Heat meter **Qheat**
with radio add-on
module



Ultrasonic heat meter
Qheat US with radio
module



Ultrasonic heat meter
Qheat US



Electronic water
meter **Qwater**



Mechanical water
meter **Qwater** and
radio add-on module



Impulse adapter for
integration into the
walk-by system



Smoke alarm
Qsmoke



Laptop and mobile data
collector **Qlog**



Heat meter **Qheat**
with M-Bus module



Heat meter
Qheat com



Ultrasonic heat meter
Qheat US with
M-Bus module



Ultrasonic heat
meter **Qheat US**



Split heat meter



Mechanical water
meter **Qwater** and
M-Bus add-on module



Impulse adapter for
integration into the
M-Bus system



Central unit



Level converter



Heat cost allocator
Qcaloric



Heat meter
Qheat



Ultrasonic heat meter
Qheat US



Ultrasonic heat meter
Qheat US



Electronic water
meter **Qwater**



Heat cost allocator
Qcaloric



Heat meter
Qheat



Ultrasonic heat meter
Qheat US



Split heat meter



Mechanical water
meter **Qwater**



Mechanical
domestic water
meter **Qwater
domestic**



Smoke alarm
Qsmoke Genius H

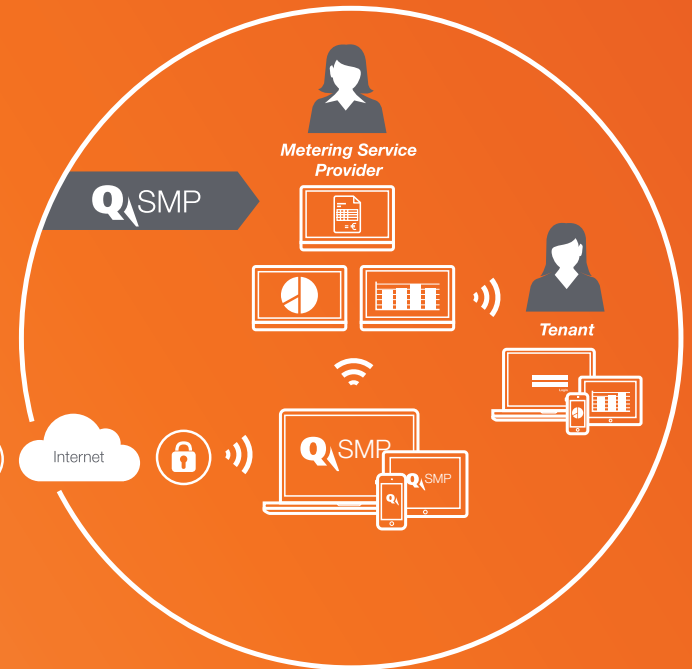
Consumption recording at the very highest level.

QUNDIS offers a complete system for automatic remote meter reading based on state-of-the-art technology: Q AMR. The benefits for our customers lie in the fully automated meter reading – without having to arrange an appointment with the residents of the building. This saves a lot on labour costs.

Q AMR can take care of all the work for metering service providers, from reading the data to transferring it to your system. They can connect your billing system directly. The data is captured fully automatically and is immediately available, e.g. to provide tenants with information during the year.

All settings and requirements can be conveniently controlled from your desk.

How does remote meter reading via Q AMR work? To put the QUNDIS remote meter reading system into operation, at least one Q gateway direct and one consumption meter are required. The meter records the consumption data and sends it by radio to the Q gateway direct. The gateway then transmits the data to the QUNDIS Smart Metering Platform (Q SMP.) Alternatively and depending on the object, a system can also be set up with network nodes and gateways.



The metering service providers can define the transmission intervals to their own server. Such a system can be extended by a several number of meters, network nodes and gateways at any time. It therefore works for building complexes of different sizes.

Since both the meters and the network nodes record and store data, they are backed up several times. The risk of metered consumption records ever being lost is thus reduced to a minimum.

And the security of the data is ensured: Q AMR transmits all data between network and server in encrypted form.

There are no reference points between the apartment unit and the device during data transmission. The data can therefore only be assigned by the metering service provider. Personal consumer data are never transmitted. This guarantees data protection for the end consumer.



 gateway 5.5 direct

QUNDIS Gateways – the right solution for every need.

Q gateway

The Q gateway is unique in combining automatic remote data transmission and monitoring of all metering devices and network nodes within a building. It records the consumption data of up to 2,500 metering devices and 5 AMR networks and transmits it by mobile communication to the QUNDIS Smart Metering Platform (Q SMP).

Q gateway direct

The Q gateway direct receives all QUNDIS metering devices in C-mode and wM-Bus compatible unidirectional third-party meters in the direct reception range. No network nodes are required. A total of up to 1,000 metering devices can be received and transmitted to the QUNDIS Smart Metering Platform (Q SMP) per gateway.

Further Product Benefits

- › **High data security:** encrypted mobile transmission, OMS security mode 5 supported radio communication, data hosting via cooperation partner IBM, complies with the General Data Protection Regulation (GDPR)
- › **Simple installation:** no electrician required for installation of the battery-operated model
- › **Fast commissioning:** one-button start method, no network management when using Q gateway direct, gateways equipped ex works with SIM card
- › **Reduced operating costs:** QUNDIS implements the SIM card management, tariff/data volume handling and data hosting
- › **Lean processes:** consumption data and status messages sent by email directly or SSH FTP to the office at the desired interval, software updates „over the air“

Germany

Reference Q AMR & Q SMP: Hecon Abrechnungssysteme GmbH

Project details

The outer facade of this this U-shaped building with its trapezoid layout faces the water on three sides, while the street frontage consists of a glassed-in atrium. The building contains a total of 68 apartments on seven floors, which are accessed by walkways opening out from a central roofed entrance hall. The project was fitted with:



69
Qheat US



166
Qwater



8
Qnode



1
Qgateway

Description of the project

In all areas this new building project meets the highest quality standards. Accordingly it was a logical solution to install a radio system for the annual readout of heat and water meters. The trapeze-shaped building with its open atrium was ideal for the installation of the stationary radio system Q AMR together with Q node network nodes from QUNDIS, connected with the battery-operated Q gateway. The firm of Hecon now receives the readout data sent directly to its offices by email twice a month.



The benefits of the QUNDIS solution

The fact that all components are battery-operated makes the installation of the overall system both simple and flexible. In addition, the new Q SMP Smart Metering Plattform implements the entire organisation and provides maximum security in transmitting the data. The automated data transmission enables us to continuously monitor the devices

which have been installed. As a result, if any device breaks down we can respond even before the customer notices the breakdown. The QUNDIS radio system also saves us the work involved in the main readout operations and any interim readouts which may become necessary.

France

Reference Q AMR & Q SMP: MULTIMAT COMPTEURS

Project details

Multimat was founded in 1957 by Mr Francis Giacomoni and now Stephane & Florent Giacomoni (picture in front of the building located 9–11 rue du Télégraphe in Paris 20^{ème}) are running this company together with their 25 employees. They have also sales branches in Lyon & Lille (www.multimat.fr).

Description of the project

On January 21st 2016 our customer Multimat, a family-owned company located in the south of Paris, commissioned their first site featuring the Q gateway and QUNDIS Smart Metering Platform (Q SMP). The selected building is a 9 level building located in the heart of Paris 20th district. A total of five Q node located on every 2nd floor (8, 6, 4, 2, Lobby) are connected with the Q gateway located on the 9th floor. Their mission is to collect the data's of 200 waters meters (hot & cold).



200
Q water



5
Qnode



1
Qgateway



The benefits of the QUNDIS solution

With 100 % of the devices radio frames transmitted via the Q gateway and Q SMP after more than two years of operation we can say that mission is accomplished!

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