



Qwalk-by

Recording consumption data
by radio



Q walk-by system

Recording data by just walking past



Since we're hot-wired for recording consumption data, let's just do away with the wire altogether.

Radio technology is a part of the future. This is especially the case for consumption data recording. We from QUNDIS know this and act accordingly as an innovative, formidable and reliable partner of meter reading services, and a pioneer of methods to use our precious energy resources with economy and sense.

Good for the individual. Good for everyone

The **Q walk-by** system is the very best example of this, because it makes meter reading as inexpensive as it is easy – just by walking past. The recorded data can not only be used for billing, but also forms the basis for other convenient services.

The system's efficient components provide maximum consumption transparency, enabling consumers to optimise their own energy consumption, thus benefitting everyone.

There and gone

Simple, fast and reliable. These three attributes are the most apt descriptions of the **Q walk-by** system. After all, it provides values for billing consumption easily, quickly and dependably. And the meter-reader does not even have to enter the tenant's flat - on the reading date, he only has to enter the commonly accessible area of the property. For smaller properties, he can even collect data outside of the building.

That not only benefits the meter-reader (who does not have to plan and mount data collectors any more), but also tenants. They no longer have to agree on a date for reading or even be there on the readout day. Life can be that easy.



Laptop/Personal Digital Assistant (PDA)

How **Q**walk-by functions

No cables. Just convenience

That's how easy
readout can be these days.

What do you expect from an efficient system for recording consumption data? Absolute reliability, easy handling and fitness for the future. The **Q walk-by** system from QUNDIS meets all of these expectations with perfect ease.

The readout

It couldn't be simpler. At the set reading time, the meters send current consumption data at short intervals. The meter-reader only has to enter the building or even just walk around it with his mobile meter-reading system. This consists of a mobile data collector and a Personal Digital Assistant (PDA) or laptop with application software. The data collector collects the radio telegrams and, after a plausibility check, sends them wirelessly to the PDA/laptop via the Bluetooth interface. The software on the PDA/laptop not only manages the data, it also shows the meter-reader the current progress of the process. After having received all data, the meter-reader can then leave the property. Back at his workplace, the meter-reader only has to export the data saved and read them for example into a billing program.

Upgrade to stationary data collectors

If data is needed on a regular basis – meaning permanently mounted data collectors are to be retrofitted with an interface for remote data transmission – the measuring devices can be reprogrammed from the **Q walk-by** system to the stationary **QAMR** system from QUNDIS at any time. This means that readout values can be called up on a daily basis without entering the property. Another step towards a technological future.





Advantages of **Q**walk-by

A win-win-win situation

Convenience gets priority.

Every day.

Nice to know: a system that benefits everybody. Because **Q walk-by** is as convenient for the tenant as it is for the meter reading service and the housing industry

Advantages for tenants



Tenant's privacy is not disturbed: the tenant doesn't even get to see the meter-reader, even though he might be a charming individual. Unless he meets him on the staircase of course where he is meter-reading per radio. The big advantage: readout and input errors possible previously are now a thing of the past, since data is checked several times and transmitted fully electronically from the readout device directly to the billing program. And error-free readout gives tenants a smile. They also like the pioneering technology of the **Q walk-by** system because it makes saving energy easy; it not only transmits annual consumption values but also monthly values as well. That gives tenants the transparency they need to trace consumption and react to any unnecessary energy consumption.

Something else should be mentioned: the entire **Q walk-by** system from QUNDIS is absolutely safe. Safe for persons with heart pacemakers and for sceptics as well who are afraid of harm from electromagnetic radiation: the optimised transmission power and minimal transmission time of the measuring devices have the effect that all values stay far below the limit values specified in the German Federal Emission Protection Directive.

Advantages for the meter reading service



The **Q walk-by** system is completely wireless. That allows easy reading of all data, as its long transmission range ensures that all sizes of buildings can be equipped with radio without planning and consumption values can be read quickly and simply. And talking of quickly and simply: this also defines the actual installation of the measuring devices. Another big advantage: after installation, the measuring devices automatically send radio protocols for test readouts. This means the meter-reader can make a test reading before leaving the building to confirm that devices have been properly mounted and commissioned. Could save a lot of time.



Advantages for the housing industry



The **Q walk-by** system is much more than a technical innovation – it also boosts the rental value of the entire property. Because on the one hand, consumption value readouts that are easy, error-free and on a realtime basis mean fast and verifiable billing for water and heat. And on the other hand, due to the high integrity of the data transmission, there are fewer billing complaints. Other convenience aspects with a positive effect on the rental value are transparency from correct billing when tenants move out, the fact that you can choose readout cycles on a monthly or annual basis and also the security of knowing that all device errors or manipulations are detected, indicated during the reading process and saved

to a databank. Measuring devices that facilitate saving energy help tenants measurably minimise their energy costs with targeted reductions. In effect, that saves more than these devices (or allocations) cost.

This gives landlords all the arguments they need for installing modern energy recording systems, and together with their tenants they do something good for both their wallets and the environment.



Technical features

The communication interface in the **Q walk-by** remote meter reading system from QUNDIS is standardised. This means that it can be easily integrated into existing billing systems. **Q walk-by** radio signals work in the range of 868 MHz on a frequency which is reserved solely for these and similar applications. The meter reading service is provided with the following information:



- ~ Device number
- ~ Consumption value on the key date
- ~ Consumption value at time of reading
- ~ Consumption values for the last 13 months
- ~ Status information of the measuring devices

A major advantage of the **Q walk-by** system is the long running time. The water meter add-on modules are designed for as much as 12 years of operation, and the service life for QUNDIS heat cost allocators is 10 years.

The system poised for the future

QUNDIS and the technology of tomorrow

We form tomorrow's standards
from the visions of today.

QUNDIS is more than a highly-professional supplier in the market for measuring devices and systems engineering. We are first and foremost a visionary company that is committed to investing in the future with extensive research and development. Day after day. The technologies of the future enable us to do much more than come up with customer-friendly products. Innovative technologies put us in a position to react to one of the greatest problems of our time: environmental pollution, climate change and the global reduction in energy reserves. The technologies we come up with should first and foremost help everyone to undertake something about the increasingly daunting global energy problems: to handle the theme conscientiously and with the utmost care.



*No matter how people will be heating in future,
we can measure it.*

Innovation rooted in tradition

QUNDIS has always technologically been a step ahead of its time. Thanks to our long tradition of successful entrepreneurship, our business partners know that they can rely on our pioneering ingenuity. Because in contrast to many of our competitors who are only passing visitors to the market, our history shows that our thinking and actions are geared to the long term. We aim to set things in motion and to change things for the better. And not only in today's product technology, but also in our role as visionary thinkers. That's the reason why we tell all of our business partners that they can rely on us. Today and in the future.

Visionary thinking

We would like to give just one example of our visionary work at this point: the **Q AMM** system. The so-called Automatic Meter Management marks the future for the **Q AMR** wireless remote readout system, already firmly established in the market. **Q AMR** enables the energy consumption of all sizes of systems to be readout centrally and directly from the billing office. Just as easy as it is fast and with an extremely high level of data security. And **Q AMM** goes a step further. In the foreseeable future, it will be possible not only to measure and analyse values, but also to regulate control elements. This enables immediate reaction to unnecessary energy consumption. A fact that is right in tune with our corporate philosophy. In addition, these systems are open for other services. For example, the integration of smoke detectors or emergency alarms.

The components of **Q**walk-by

High tech can be that easy



Heat cost allocators

The hallmark of **Q walk-by** heat cost allocators is their ability to communicate coupled with simple handling.

Compact and remote sensor devices are offered as one-sensor and two-sensor devices, enabling them to be used on practically all radiators. Extensive mounting accessories are also available.

Heat cost allocators can be operated both at a uniform power level (uniform scale) and with programming for specific radiators (product scale). The devices are parameterised via an IrDA interface wherever necessary.



Add-on radio modules for water meters

The add-on modules for radio-ready mechanical meters record counting pulses and calculate the meter count from these. There are add-on radio modules available for radio-ready water meters from the manufacturers Elster, Delta-mess and Wassergeräte. After mounting, the add-on radio modules can be parameterised via the integrated IrDA interface and then subsequently changed from energy-saving storage mode to operating state.

Radio-ready water meters can also be retrofitted into the radio system with the add-on radio modules. A add-on radio module for Allmess water meters is in preparation.



The mobile data collector

This forms the basis for the mobile remote meter readout system. It receives all consumption values of the measuring devices and transfers them to the PDA/laptop. It is battery operated and, delivered in a transport bag, is protected from adverse weather. The bag enables the meter-reader to operate the PDA or laptop with both hands. The radio protocols of the measuring devices are received fast, reliably and at a high range. The mobile data collector then communicates with the PDA/laptop responsible for data storage via an integrated Bluetooth interface.



PDA/laptop and readout software

The data centre for mobile data readout: its integrated Bluetooth interface forms the bridge to the mobile data collector, and its installed readout software controls and monitors data and interfaces. Extensive import and export functionality of the PDA/laptop guarantees optimal adaptation of the system to the existing data processing structure.



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