

## EMERIS

Consistent data communication  
from the meter right through to  
the invoicing

Simple, unitised and sustainable



elster

Leading the World  
in Metering Technology

# EMERIS

## Networked technology combines convenient meter reading with efficient utility billing

- Do shafts in hard to reach places or busy roads cause you problems when reading the meter? Is reading the meter impossible due to the shaft being flooded again?
- Do you often have to deal with surprises in rural areas because you don't know whether the reading point is still easy to access? Is a recently erected fence blocking the free access or are the paths still passable?
- Does it cost you a long time if you firstly have to conquer "in-house barriers" in spacious industrial plants or if the employee responsible has something more important to do?
- Do your employees in buildings with several accommodation units have to put up with long waiting times? Or return empty-handed if the resident is not at home despite having organised an appointment?
- Are meter readings from manually recorded meter data piling up on your desk and waiting to be recorded in your IT system?

Reading meter data sounds easy, but often proves to be more complicated. Increased time and effort, however, come at a "high price" or in simple terms: are "expensive".

### Data management that doesn't give you a headache

Managing data is anything but easy. Some of the data end up on the desk as individual sheets of paper while others are managed as longer lists and subsequently entered into your IT system. At the same time, the meter data must be clear in order to transfer it correctly into data processing and to guarantee a flawless statement.

The EMERIS radio system offers problem-free and convenient meter reading, paired with a considerable saving. In addition to the highest measuring accuracy, it also offers consumer-oriented data recording. Invoicing errors and meter manipulation are ruled out. Inconvenient waiting times and delays are omitted and leaks are identified quickly. The data recorded can be smoothly integrated into your existing system and further processed. In addition to consumer data, many other parameters can also be analysed. This ensures an optimum overview of the consumption quantities and consumer behaviour for optimum control of an innovative supply. The EMERIS radio system allows you to benefit from the continuous data communication from the meter right through to the invoice.

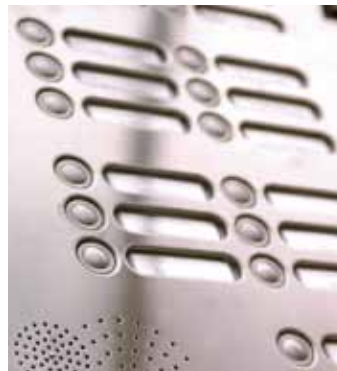
Safe recording of meter readings in shafts and hard to reach measuring points in a matter of seconds



Inconvenient waiting times through restricted access with major customers or in industrial plants is no longer a problem



Thanks to remote reading, a date does not have to be agreed upon and there is no need to access houses



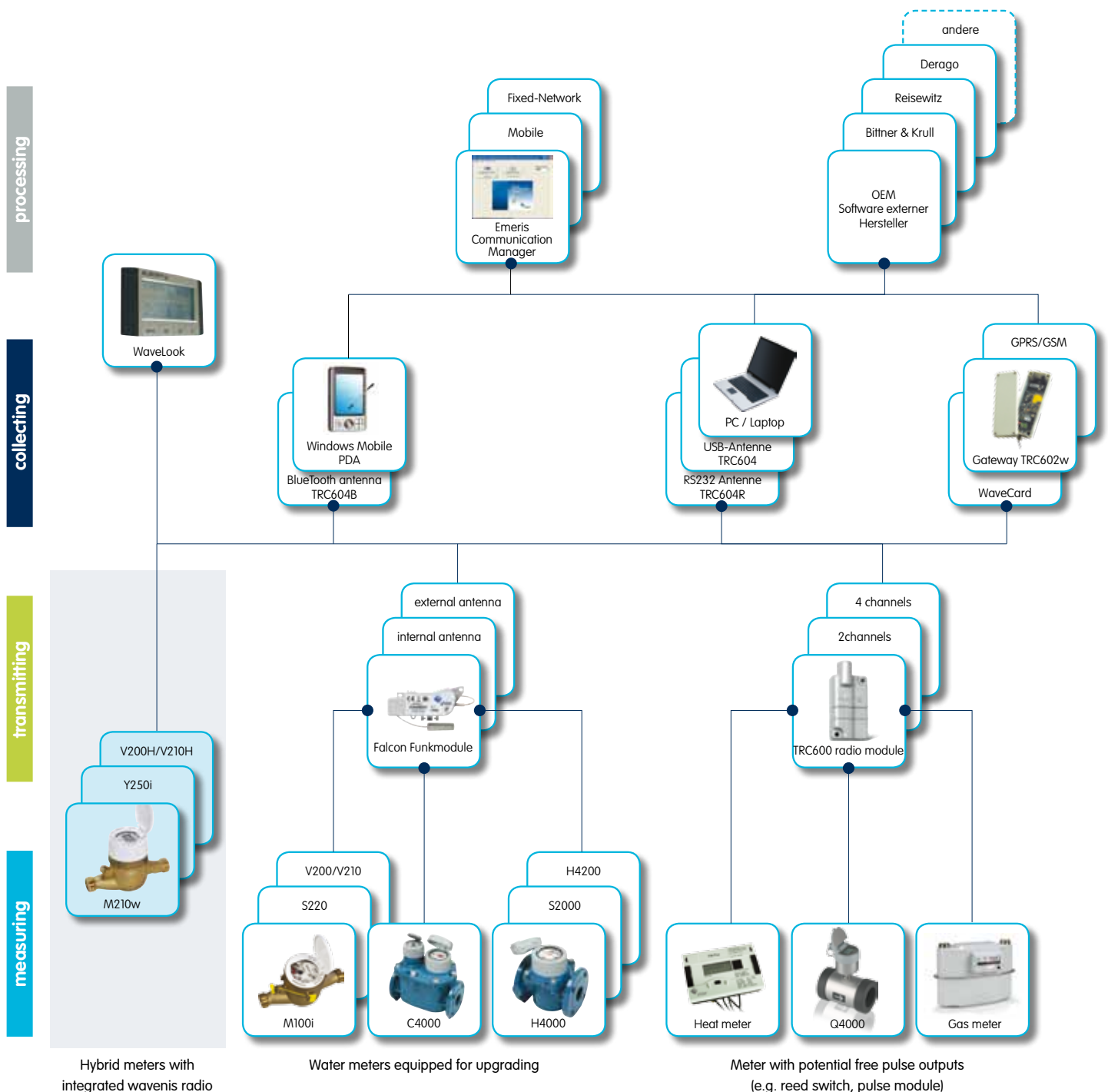
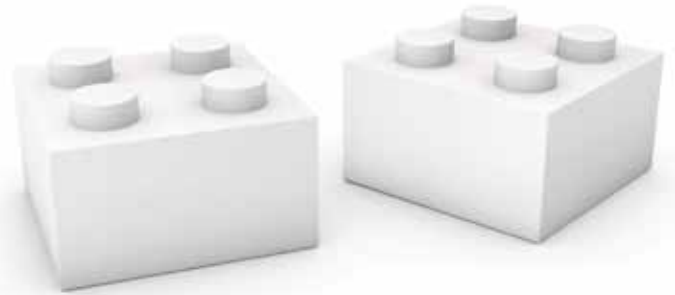
The time-consuming recording of meter reading forms or hand-written meter readings is no longer necessary



# The kit for reliable data communication

## The advantages of the modular system

The advantages of a unitised system are obvious. Depending on demand, you can adapt components to the new requirements. You can choose our water meters with integrated radio modules today. You can also, however, upgrade our conventional bulk meters with radio modules in due course. Our meters and radio modules can be smoothly integrated into the software of external suppliers. With EMERIS you are ready to take on any future challenges.



# The EMERIS products



## TRC600 radio module

The radio module is intended to be connected to the meter with pulse output. It is ideal for use in several areas as up to four meters can be connected

- bidirectional 868 MHz technology
- long battery life (up to 15 years)
- memory: up to 24 measured sets/2100 measured sets
- manipulation, leakage and battery status alarm
- flood-proof (IP68)
- also used as a repeater



## TRC604 Radio antennas

The Emeris radio system contains a number of various radio antennas for laptops, PDAs and other recording devices

- Bluetooth antenna
- USB antenna
- RS232 antenna with 500mW
- CF cards



## TRC602W Gateway

In the fixed network the gateway acts as an interface between the servers and the automatically readable meters of a utility company

- communication via wavenis protocol to the radio modules/radio meters
- secure and reliable data communication via GPRS to the host server
- identification of manipulation, leakages and other alarm notifications
- easy installation and assigning of parameters via SMS



## Falcon radio module

The radio module to be directly fitted to the meter

- simply attach, assign parameters and its complete
- no cable connections necessary
- bidirectional 868 MHz technology
- internal or external antenna
- flood-proof (IP68)



## M210 Hybrid Water Meter

The multi-jet hybrid water meter is a meter which is based on many years of hydraulic development work. Its electronic counter is not only used to make reading easier but also contains a wavenis radio chip in order to make transferring the original meter status possible.

- Can be delivered in all common house connection nominal sizes and construction lengths
- Alternatively, the V200/V210H piston flow and Y210R inle jet hybrid meter are also on offer
- All meters are obviously water-resistant (IP68) and have a long-life battery (> 2 calibration periods)



## WaveLook

With the WaveLook Display up to four measuring points are addressed and read without any other accessories. The consumption and service data are provided on a large display

- automatic data retrieval, daily
- manual data retrieval, upon request

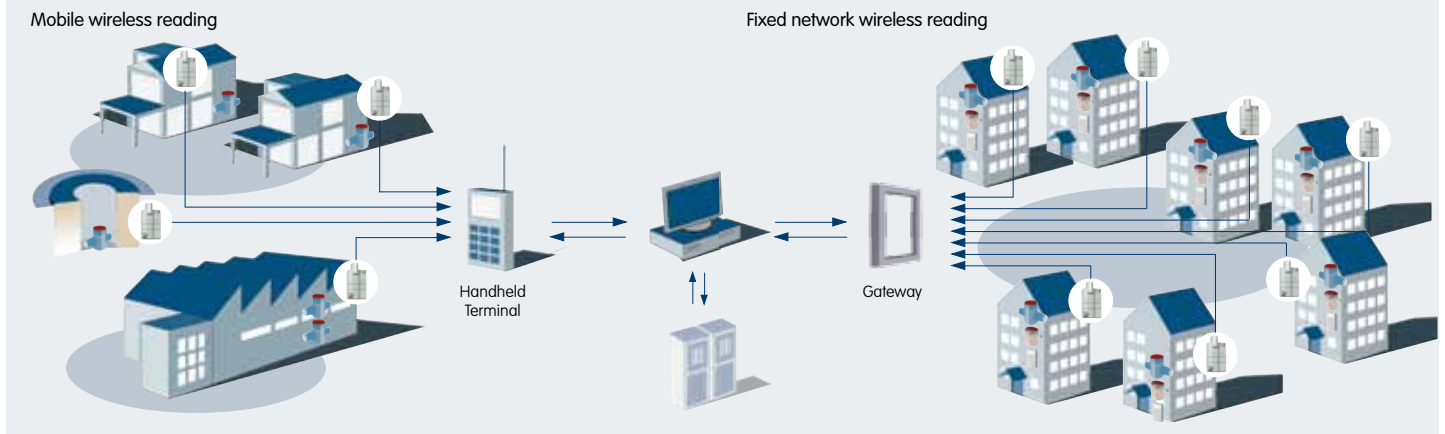


## EMERIS Communication Manager

The EMERIS Communication Manager is a management software for WINDOWS PC for data transfer with the handheld terminal or gateway. The import and export route and user information of the billing system as well as evaluation functions are already integrated.

# Wireless reading - mobile or stationary

## Either way it's easy and efficient



### Mobile wireless reading

In the route-based reading, consumption data is read via radio using a handheld terminal when passing by or driving past. This is how, for example, meter readings are retrieved from shaft meters without any danger in a matter of seconds. As the EMERIS radio modules only transmit if they are explicitly addressed with their series number, data misuse is excluded.

The meter data is then transferred to a PC work station in the route manager software. There it is prepared by filter function and exported in various formats to the respective accounting software. This guarantees a reliable statement provided exactly on the due date.

### Stationary wireless reading

The stationary "fixed network" wireless reading is recommended for large areas with a high concentration of measuring points. Any number of measuring points with radio, transfer the consumption data into the data management system via a data gateway. The measured data is transferred safely and without any disruption. Irrespective of the time of day and weather conditions, the current consumption values of the meters can be retrieved in groups or individually at any time. The networks are installed, managed and read with a convenient network manager software.

# Elster – the full-range supplier for water supply

As a leading manufacturer of water meters, in addition to our bulk meters and innovative electronic hybrid household water meters, we offer products and services for all areas of water supply.

You have unlimited access to our know-how which we have developed across the world. The experience and knowledge are reflected in our systems and high-quality components. This presents the basis for a future-oriented partnership.

## Open to other systems and areas

In addition to the standards such as M-Bus, the Elster M210 genius hybrid water meter works with the wavenis protocol which can be used in various applications. In addition, they are open to all other systems and protocols. This makes our water meter "Smart Metering Ready". They can be smoothly integrated into an existing network or protocol for electricity and gas meters. In order to keep up-to-date with these developments, we are active in the working groups for Open Metering Standards. Smart Metering, Home Automation or E-mobility - EMERIS provides the data that you require.



## Your competent partner – for Smart Metering too

Gas, electricity, heat and water reading from one source: for this you need a competent and reliable partner. We support you in the field of joint reading and accounting, informing consumers and the associated improved customer loyalty.

Meeting the various national, regional and international standards is a particular challenge. Elster actively operates in committees and working groups in order to help Smart Metering reach a standard which ensures the interoperability with devices of other manufacturers.

Besides gas, electricity, heat and water meters for Smart Metering our portfolio also includes the necessary components for data communication i.e. networking of the various system components.

The network operator can easily retrieve accounting data, load data or possibly status data from the meters via wired or wireless data communication and allow their customers insights into this data. Moreover, the energy supply can be switched on or off upon request via 2 channel communication.

The customer's individual energy consumption is therefore transparent. This then gives them the opportunity to reflect on their consumption and to purposefully further develop their energy awareness.

Elster offers various Smart Metering system solutions which can be individually implemented for various topologies. The many years experience in the field of electricity, gas and water is now partnered with professional competence in the communication and data management.

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The MUC supports the conventional communication technologies such as radio and wired M-BUS in accordance with the OMS standard.