

EMERIS

The intelligent metering solutions from Elster



EMERIS

Perfectly suited for all data-capture applications

Main characteristics

Proven

Millions of MIUs deployed worldwide.

Scalable

Our technology ensures you can start small or big, mobile or fixed network, and move in any direction without having to replace anything.

Flexible

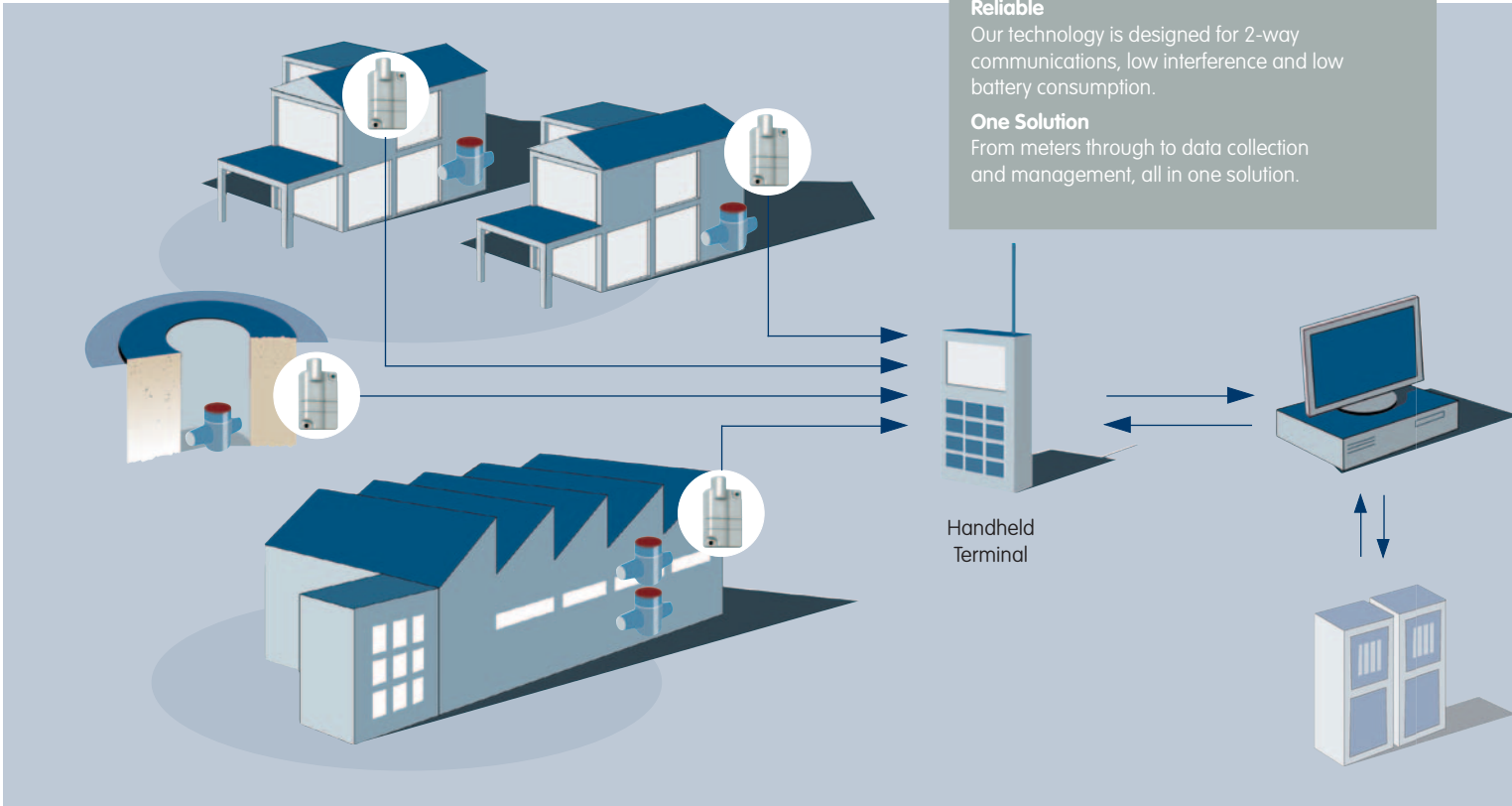
Our mobile and fixed network systems to create the application that best suits your needs.

Reliable

Our technology is designed for 2-way communications, low interference and low battery consumption.

One Solution

From meters through to data collection and management, all in one solution.



With increasing customer service demands, legislation and the need to improve network efficiency and water conservation as well as reduce costs, there is a growing need for flexible, efficient and cost-effective water meter reading solutions.

The advantages of radio reading are:

- Greater customer satisfaction through more accurate readings and improved customer safety and privacy
- Faster and safer reading, reducing health and safety risks for meter readers
- Avoidance of mistakes inherent to manual reading
- Ongoing access to consumption data without appointment scheduling
- More rapid billing possible as reading is made more efficient

Elster offers a complete range of AMR and AMI solutions, including radio prepared water meters, radio modules, data capture devices through to software applications for route and network management, as well as data management and analysis.

The Elster solutions approach allow utilities to implement flexible, cost-efficient reading systems that can be integrated into today's operations, yet allows the system to evolve as the utility grows or as technology advances.



V200H/V210H
Domestic volumetric hybrid meter with in-built radio communication module

Mobile meter reading

The simplest and easiest automatic meter reading system to install. This system utilises a meter interface unit (MIU), which automatically transmits the meter reading to a hand-held device. All the meter reader has to do is cover her or his usual route, and pick up the readings as the handheld device enters within range of a MIU.

The system allows utilities to detect any anomalies such as leaks, backflow, vandalism, by automatically sending alerts over the wireless connection.

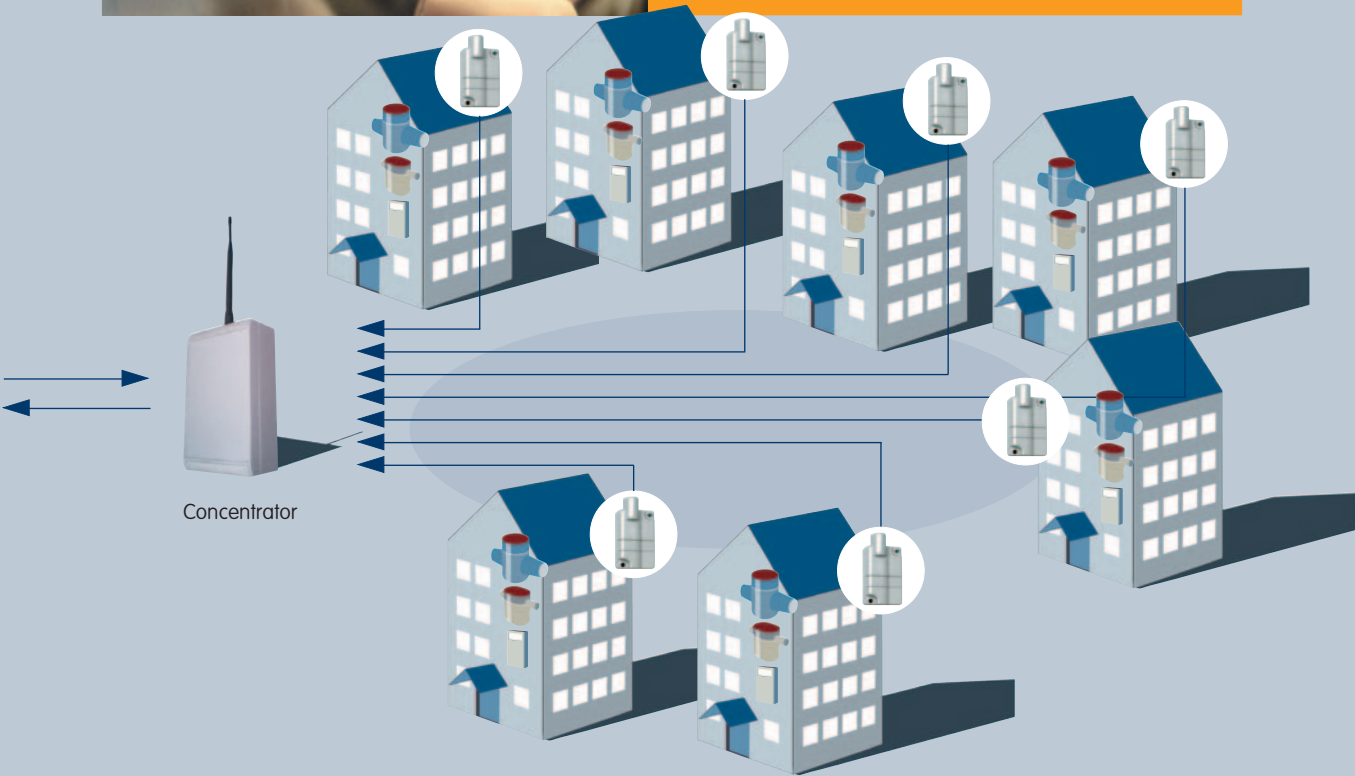
Reading, together with any anomalies, can then be downloaded into a meter management and billing system, either at the office or by data transfer from the meter reader's home.

The base technology of Emeris allows for a small mobile reading installation to migrate to a full large scale mobile or fixed network deployment by just adding new radios and communication devices.



Customer Display Unit (CDU)

The perfect accessory for AMR systems, this convenient viewer gives customers an instant view of their water consumption. Not only can it show real-time volume and cost information, but it also displays alarms in case of leaks, backflow, tampering, and low battery conditions. Measuring 11cm x 6cm, and fully programmable to display only the information that you want, the CDU can be easily mounted on a wall or window, or just sit your desktop.



Fixed Network

The ultimate in intelligent meter reading solutions, a fixed network system combines unparalleled efficiency and flexibility with cost reductions and customer service improvements.

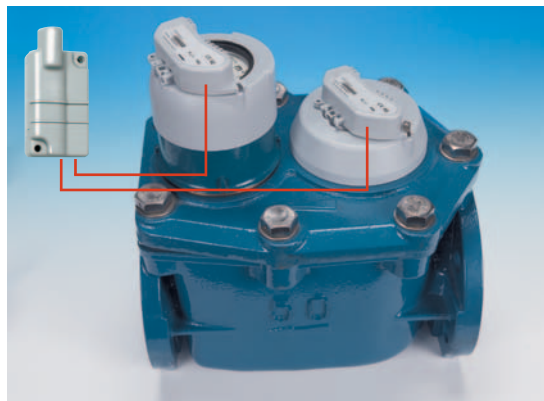
The MIU cannot only be read and configured remotely, but also transmits alarms on detection of a leak, low battery or tampering. The system also includes repeaters which extend the transmission range of the MIUs, concentrators which link up 2,000 MIUs to the network, application systems to control the network and links to back-office systems for billing purposes.

This solution enables the setting up, administration and operation of the meter reading system, all from one place without the need to even leave the office.

Sub-metering

A small fixed network containing a radio modem enables meters to be read from a PC, in the same way as that of a large installation, but without the need for repeaters and concentrators.

Elster has prepared both domestic and C&I water meters for radio communication modules. The backflow recognition and the non-interference of magnetic fields guarantee that the meter readings are always accurate.



The combination water meter C4000 fitted with PR6/7 pulsers and radio communication module, TRC600



Bulk water meter S2000, the single-jet meter for cold water with radio communication module



V200/V210 domestic volumetric meter for accurate water measurement

Products of the EMERIS range

Mobile



TRC600

The radio module is attached on pulse output meters for mobile and fixed network readouts. It is ideally suited for multiple meter use since up to 4 meters can be linked to the TRC600 unit.

- Bi-directional 433MHz, 868MHz technology.
- Long battery life (more than 10 years).
- Tampering, leakage and battery-status alarms.



TPR6/7/11

The radio module for direct fitting onto meters. It combines the capabilities of a pulser and a TRC600 radio module in one unit.

- Bi-directional 433MHz, 868MHz technology.
- Long battery life (more than 10 years).
- Tampering, leakage and battery-status alarms.



TRC603 radio modem

The TRC603 radio modem is designed for a PC/PDA connection and serves as a simple data-capture interface and control device for the whole AMR network.

- Weight (less than 50g).
- Choice of interface (USB or RS232).
- Compatible with Windows 2000, XP and Windows CE.



Bluetooth radio interface

An easy-to-use Bluetooth-RF gateway that creates a virtual serial link from your bluetooth handheld device to Elster's radio modules.

- Two way Bluetooth gateway.
- 20 metre range for Bluetooth connection.
- Rechargeable battery.
- Application interface for Windows PDAs and handheld terminals.



Data Collection Handheld

The Data Collection Handheld is used for radio readout and for manual input of consumption data. It is designed for extreme operating conditions.

- Protection class IP65.
- Long battery life.
- Combines radio and manual data input.
- Windows mobile.



EMERIS Route Manager

The EMERIS Route Manager is the route-management software for Windows PC for the data transfer with the handheld, as well as the import and export of route and user information. Suitable for use with all common billing systems.

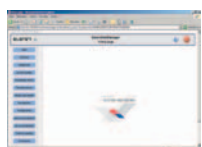
Fixed Network



TRC602 concentrator

The TRC602 concentrator in the fixed network functions as the interface between the servers and the automatically readable utility meters. Communication with up to 2,000 radio modules.

- Secure and reliable radio communication.
- Simultaneous execution of up to 255 queries.
- Recognition of tampering, leakage and other alarms.
- Protection class IP66.



EMERIS Net Manager

The EMERIS Net Manager is software for setting up and reading of fixed networks. The tamperproof and non-retroactive impulse modules guarantee that the meter readings correspond with the consumption data transferred.



Customer Display Unit

With the CDU up to four measuring points can be monitored and read out. The consumption and service data can be shown on the LCD display.

- Compact and user-friendly design.
- Easy installation by use of a magnetic sticking strip.
- Provides additional information such as room temperature, time and date.

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