

EMERIS Primus

Frequently Asked Questions



About the pack

What is included as part of Emeris Primus?

Primus Emeris includes:

- Radio modules – the number of modules can be scalable to meet your needs.
- Emeris 9900 hand-held unit.
- Emeris Communication Manager software, which includes Module C for configuration of radios, Module D for data management and Module M for mobile reading.
- System documentation including: Quick start guide, specification sheet, ECM User Manual and FAQs.
- 1 USB Radio modem, which serves as a link between the PC and the radios (optional).
- 1 Bluetooth belt-box, which is the link between a PDA/Smartphone and the radios. It can be used as a replacement for the Radio modem (optional).

What if I need more radios?

Contact Elster or your agent to purchase any additional radios that you may require.

How does the whole system work?

A battery-powered wireless radio is connected to each water meter. Each radio reads and stores meter data, and responds to data and administration requests from handheld terminals or a PC. The system allows for detection of any anomalies such as leaks, backflow, vandalism, by automatically sending alerts over a wireless connection.

When using the Radio Modem connected via USB port to a PC or Laptop, readings are made directly from the PC using the Emeris Communications Manager (ECM) application (see ECM User Manual).

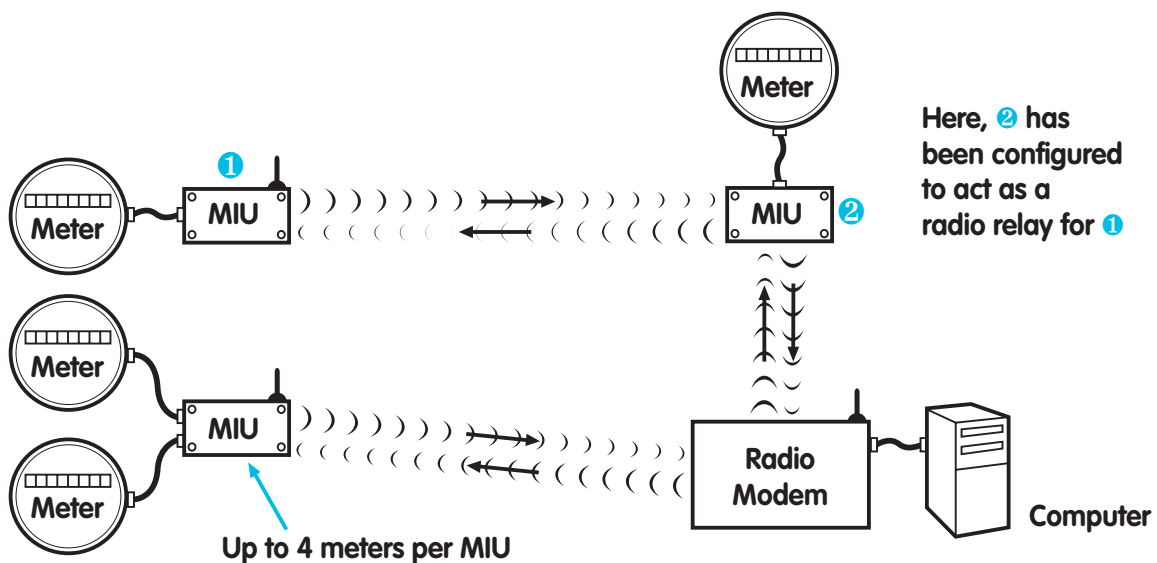


Figure 1

When using the Emeris 9900 hand-held unit to do mobile readings, Module M, which is part of the ECM suite, is used to communicate with the radios directly as depicted in Figure 2. Readings are then stored in the Emeris 9900 hand-held unit memory and are then downloaded onto the PC using the data transfer facility of the ECM.

Elster ensures a seamless integration and scalability of all its solutions. The network topology allows for small mobile reading systems to migrate to a large scale deployment by just adding new radios.

About the hardware

Are the radios waterproof?

Radios are fully waterproof, IP68 rated.

What is the difference between the USB radio modem and the Bluetooth module (optionals)?

Both devices can be used as an interface to communicate with the radios instead of a hand-held unit. The Radio modem is connected via USB to a PC or Laptop. This way, reading can be done directly from the computer in the office.

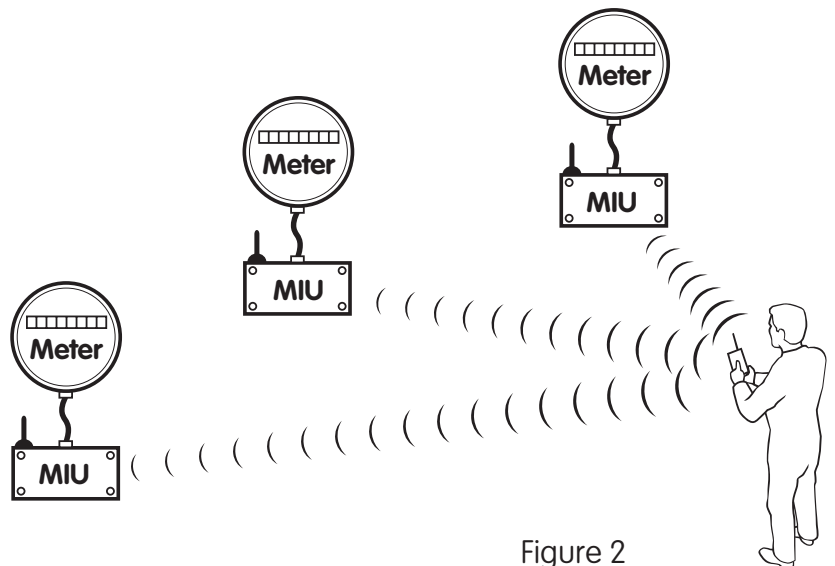


Figure 2

When meters and radios are located at a distance from one another and away from the office, a PDA or Smartphone can be used to carry out the readings by standing near to the meters. In this case the Bluetooth belt module is used as the communication bridge between the radios and the PDA/Smartphone. Once the data is collected in the handheld device, it can be downloaded onto the PC.

Can I use the USB Radio Modem for mobile reads?

Yes, the USB Radio Modem can be connected to a portable PC to be used instead of a handheld unit.

I have not been able to read one of the radios, why could this be?

A number of reasons can cause this:

- The radio can be out of range – If reading with a portable device, try to get closer to the meter.
- The radio signal can be blocked by an obstructing object such as a vehicle. If reading from a handheld device, try to get the readings from a different location avoiding the obstructing object.

What is the advantage of using the Emeris 9900 hand-held unit?

- The Emeris 9900 hand-held unit has an internal radio card, which makes it easier to use than using an external bluetooth module. It comes

fully pre-configured with the reading software pre-loaded and ready to use. This makes it the most efficient and cost-effective way of reading meters.

What is the battery life of the radios?

The battery is designed to last between 12-15 years. However, as it is the case of any battery, the life expectancy varies and will be influenced by the usage and installation conditions.

What factors affect the signal range of the radios?

Any objects between the radio and the receiving point will affect the range of the radios. This can include walls, pit lids, water, trees and vehicles. The fewer objects placed between transmitter and receiver, the better the signal strength.

What factors affect the battery life of the radios?

Usage. The more frequently readings are attempted, the more the battery is consumed.

Is the Radio modem battery powered?

No. The radio modem is powered through the USB port.

About the software

What is the .NET framework 1.1 and why do I need to install this?

Microsoft .NET framework 1.1 is the language platform in which ECM has been developed and thus is required to run the application.

What is the licence number for ECM?

This is a customer unique licence serial number that allows users to use ECM. This is required only once when installing ECM.

What PDA/Smartphones can I use?

Any handheld device with Mobile 6 or above can run Module M of ECM. Additionally, Bluetooth connectivity is required to interface with the Bluetooth belt module. (optional)

How can I access the historic data?

On Module D of ECM, click the 'History' button to access the historic data for each measuring point in the network. Data can be narrowed by date brackets, last readings and will be shown graphically for better visualisation of data.

Who do I contact if need extra support?

Visit www.elstermetering.com for more information or email us at: water.metering@gb.elster.com

About setting up the system

Can I fit the radios onto any meter?

Yes, provided you have TRC600 radios and the meter has a pulse output, the radios can be used to read any meter. Please refer to the Emeris Primus documentation for guidance on how to connect the radios to pulse probes. Also visit Elster website for an updated list of FAQs.

Can I read more than one meter with one radio?

Yes. This will depend on the number of channels the radios are purchased with, up to a maximum of 4. See Emeris Primus documentation for details on how to connect 1-4 meters.

What is the recommended position for installing TRC600 modules?

The best position is upwards, i.e. with the antenna pointing up to the sky. Also, it must be ensured that the antenna is far away (as much as possible) from metallic surface (e.g. metallic lid) and at least 20 cm away from another radio module.

Can I program the radios using the mobile application in the PDA/Smartphone?

Yes. Please refer to the ECM User Manual for full instructions.

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