

A low-angle, upward-looking photograph of several modern skyscrapers with glass facades. The sky is blue with some white clouds. A large, semi-transparent blue circle is overlaid on the right side of the image, containing the text "Smart metering solutions".

# Smart metering solutions

**elvaco**  
COUNT ON IT

# About Elvaco

**We are a complete supplier of products and services for remote meter reading, sub-metering, indoor climate control and more. Our goal is to make our partners and their customers more digital and energy efficient!**

We provide first in class end to end smart metering solutions. Using our industry leading experience and knowledge of metering and network protocols, including M-Bus (both wired and wireless), LoRaWAN and NB-IoT, we create seamless and complete data flows, all the way from meter or sensor point to HES, BMS or prepay service provider. We offer products for every metering project - from Gateways, communication modules and meters to software solutions including EVO, our cloud-based system for data and device management.

Our ambition is to provide and manage the entire data measurement chain for our clients - meeting all international standards regarding data integrity and security as well as providing full inter-operability on our meter agnostic platform, in the most cost efficient manner. With high-quality products, a world-class support department and fast deliveries, we look forward to helping you!

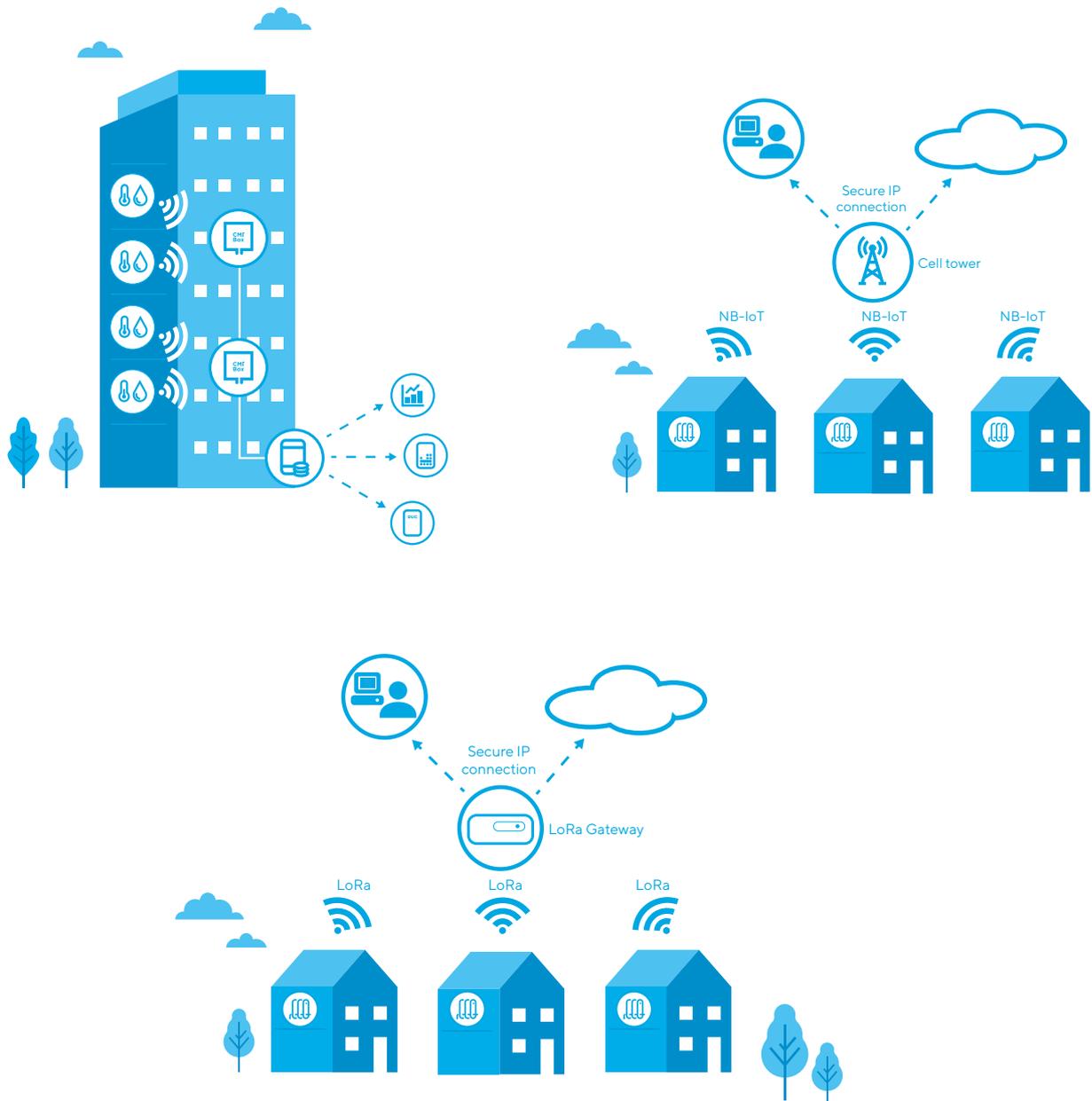
*Elvaco shall be the technology and market leader of energy connectivity. We believe that metering connectivity should be easy to implement, access and maintain.*



# Our Technologies

**Elvaco is technology agnostic and work with several technologies to find the best solution for your needs.**

Elvaco sees great importance in using highly sophisticated technologies. **M-Bus** is a communication technology for precise remote reading of various meters. In addition to the cost-efficient wired standard, the radio-based **wireless M-Bus** has also been established in the industry in recent years. The radio-based technology **NB-IoT** also works completely wirelessly and brings optimised power consumption. The wireless network protocol **LoRaWAN** was also developed with the background of realising smart end-to-end solutions from the sensor to the head-end system. Our portfolio of technologies is completed by the established mobile radio standard **LTE**.



# Products M-Bus, wireless M-Bus

## CMe3100 - M-Bus Metering Gateway for Fixed Network

CMe3100 reads up to 512 meters, compiles meter data in customized reports and delivers it to a receiving system by a set schedule and integration protocol via the fixed network. CMe3100 is easily configured and updated through its web interface and supports a wide range of integration protocols, such as BACnet, ModBus, DLMS, JSON and REST. The product has a full M-Bus decoder.



Product	Item No
CMe3100 M-Bus Metering Gateway for Fixed Network, 8-512 meters	Various

## CMe2100 - M-Bus Metering Gateway for LTE

CMe2100 reads up to 256 M-Bus meters, compiles meter data into customized reports and delivers it to a receiving system by a set schedule and integration protocol via LTE. CMe2100 LTE supports 16 M-Bus loads (16T) physically and is compatible with all meters that use the M-Bus standard protocol. It can be configured and updated remotely through text messages or HTTP. The product has a full M-Bus decoder.



Product	Item No
CMe2100 M-Bus Metering Gateway for Mobile Network LTE	Various

## CMeX50 DIN-mounted Wireless M-Bus Receiver

CMeX50 is a Wireless M-Bus Receiver which enables a Gateway from Elvaco's CMe Series to communicate with Wireless M-Bus meters. CMeX50 handles up to 800 Wireless M-Bus meters and guarantees safe data transmissions through individual encryption keys. The product is equipped with an IR interface which makes it easy to connect to other CMe/CMeX products without having to use any cables.



Product	Item No
CMeX50 Wireless M-Bus Receiver 868 MHz	1050062
CMeX50 Wireless M-Bus Receiver 433 MHz	1050128

## CGc Box for fixed network

The box contains CMe3100 and an M-Bus Master from CMeX10 Series to extend the number of meters up to 512. The box is equipped with a breaker to facilitate service work. It is also available with wireless M-Bus communication, with or without filter and amplifier kit, for improved wM-Bus reception.



Product	Item No
Box-build with CMe3100 for 8-512 meters (8T-512T), M-Bus	Various
Box-build with CMe3100 for 8 meters, wireless M-Bus	Various
Box-build with CMe3100 for 8 meters, amplified wireless M-Bus	Various

### CGc LTE Box for Mobile network

The CGc LTE box consists of a CMe3100, CMeX50/CMeX10S-13S and an LTE router that communicates via mobile networks (4G/3G/2G) mounted in a CM-Box. The CGc LTE box is used when LTE connectivity is needed for accessing wired M-Bus meters (up to 512) or wireless M-Bus meters. There are variants for wired and wireless M-Bus (434MHz and 868MHz).



Product	Item No
CGc LTE Wired M-Bus 8-512 T	Various
CGc LTE Enhanced WM-Bus, 434/868 MHz	Various
CGc LTE Stream mode 434/868 MHz	Various

### CMi-Box Wireless M-Bus Receiver

This box contains the CMi5110 for collecting meter data via wireless M-Bus. The meter data can be delivered to a M-Bus metering gateway. The box is available with a 24 V or 230 V power supply, and with internal or external antenna.



Product	Item No
CMi-Box	Various
CMi-Box Enhanced	Various

### Indoor temperature/humidity sensor, M-Bus

Elvaco offers temperature and humidity sensors, both for indoor and outdoor environments. The product line enables simple and cost-effective metering, which enables a more effective use of energy and a better real-estate climate. Sensors are available with M-Bus or Wireless M-Bus communication, as well as with or without display.



Product	Item No
CMa10 - Indoor temperature/humidity sensor, M-Bus	1050131
CMa10w - Indoor temperature/humidity sensor, Wireless M-Bus	1050132
CMa11 - Indoor temperature/humidity sensor, M-Bus	1050133
CMa11w - Indoor temperature/humidity sensor, Wireless M-Bus	1050134
CMa12w - Indoor temperature sensor, Wireless M-Bus	1050135

New!



# Elvaco Edge

## Elvaco Edge - Wired and wireless M-Bus Gateway including connectivity

Elvaco Edge is our new, ground-breaking Gateway. Versatile power supply options with best-in-class battery driven gateway for wired and wireless meters.

Some of the benefits:

- Seamless and instant access to your meter values with included connectivity
- Extremely high sensitivity on wireless M-Bus reception
- Connect any M-Bus meter (wired or wireless) conforming to EN-13757 (EN1434) and OMS



Product

Item No

Elvaco Edge Gateway (Available 2024)

-



**New!**

# Elvaco Sense

## Indoor sensors, wireless M-Bus

The new Elvaco Sense series includes wireless M-Bus sensors for indoor applications, measuring temperature, humidity, CO<sub>2</sub> level, motion and light.\* The Sense series offers both battery- and solar-powered devices. Thanks to their minimalistic Scandinavian design, they can be discreetly installed in any commercial, public, or private building. The sensors offer long battery lifetime – some models up to 16 years – and the upcoming solar-powered sensors can function for up to 30 days in complete darkness.



*\* Sensors for temperature, humidity and CO<sub>2</sub> are available now. More to come.*

Product	Item No
Elvaco Sense 100W - WM-Bus indoor temperature sensor	1050080
Elvaco Sense 200W - WM-Bus indoor temperature & humidity sensor	1050081
Elvaco Sense 300W - WM-Bus indoor CO <sub>2</sub> multi sensor	1050082

# Communication modules LoRaWAN

**Elvaco offers integrated meter modules to all leading meter manufacturers for heat meters in the market.**

The modules have long communication range and high energy-efficiency to meet the needs in IoT. The modules are easily configured through Elvaco OTC (via NFC).

## **CMi4110, Integrated meter module for Landis+Gyr**

Compatibility: L+G UH50, L+G UC50



## **CMi4111, Integrated meter module for Landis+Gyr**

Compatibility: L+G T230, L+G T330



## **CMi4130, Integrated meter module for Itron**

Compatibility: Itron CF 51, Itron CF 55, Itron ECHO II



## **CMi4140, Integrated meter module for Kamstrup**

Compatibility: Kamstrup MULTICAL 403/603/803



## **CMi4160, Integrated meter module for Diehl Metering**

Compatibility: Diehl SHARKY 775



## **CMi4170, Integrated meter module for Engelmann**

Compatibility: Engelmann SensoStar, Engelmann SensoStar C



# Sensors LoRaWAN

**Elvaco offers LoRaWAN sensors for measuring of, for instance, temperature, humidity, CO2 level, movement and VOC level.**

The sensors are available for both indoor and outdoor use, and are divided in three different product series, ERS, EMS and ELT. Each series has different focus and functionalities. The sensors are easily configured through a user-friendly mobile app.

## **ERS - Indoor sensor, LoRaWAN**

Measuring of temperature, humidity, light and motion



## **ERS CO2 - Indoor sensor, LoRaWAN**

Measuring of CO2 level, temperature, humidity, light and motion



## **ERS CO2 Lite - Indoor sensor, LoRaWAN**

Measuring of CO2 level, temperature and humidity



## **ERS VOC - Indoor sensor, LoRaWAN**

Measuring of VOC level, temperature, humidity, light and motion



## **EMS - Indoor sensor, LoRaWAN**

Measuring of temperature, humidity, acceleration, door openings/closings, and water leakage



## **ELT-2 - Outdoor sensor, LoRaWAN**

Measuring of temperature, humidity, acceleration and atmospheric pressure



# Communication modules NB-IoT

**Elvaco offers integrated meter modules with NB-IoT communication for heat meters from the well-known meter manufacturers Landis+Gyr, Kamstrup and Diehl Metering.**

The modules are designed to bring all the benefits of NB-IoT and to enable our customers to meet the higher requirements of range, lifetime and security. The modules are easily configured through Elvaco OTC (via NFC).

## **CMi6110, Integrated meter module for Landis+Gyr**

Compatibility: L+G UH50, L+G UC50



## **CMi6140, Integrated meter module for Kamstrup**

Compatibility: Kamstrup MULTICAL 403/603/803



## **CMi6160, Integrated meter module for Diehl Metering**

Compatibility: Diehl Metering SHARKY 775, SCYLAR Int 8



# One-Touch Commissioning

**One thing that differentiates our products from other products on the market is that they are configured and deployed via the Elvaco One-Touch Commissioning solution.**

The OTC solution digitalizes the entire chain - from ordering of the product all the way to deployment. Just start the Elvaco OTC App in your Android phone, select your preferred configuration profile and place the phone next to the module. Settings are automatically written to the device via NFC. By using device-specific encryption keys, Elvaco One-Touch Commissioning helps assure that your products are deployed in a secure way.

## elvaco.evo

**Our meter value portal for collection, visualization and analysis of energy data for utilities, property owners and service providers. The level of service is determined based on your needs and prerequisites - ranging from total responsibility to integration to existing metering system.**

- Access 24/7 to your meter data
- Track collection in real-time (down to minute level in resolution)
- Choose whether you want to look at single meters or larger areas
- Map views and visualization of meter alarms
- Custom dashboard
- Branding with your logo and url



# Sustainability

**By creating business built on a sustainable development, Elvaco has a place today and in the future. By providing products and services that reduce the overall energy consumption, Elvaco has a positive impact in the sustainable world.**

Elvaco is today enabling thousands of companies around the globe to become more energy efficient by continuous innovation and new solutions within energy connectivity.

The Elvaco logo consists of the word "elvaco" in a bold, lowercase, blue sans-serif font. The letter 'l' is significantly taller than the other letters, creating a distinctive vertical element.