

# **PRODUCT CATALOGUE**

product wall on OMS – H12.1/G60

Frankfurt 29.11. – 01.12.2022

# Model G2-IPS-C868WMB



## PRODUCT DESCRIPTION

### Model G2-IPS-C868WMB

Inductive sensor complete with 868 Mhz frequency, double stack Wireless-Mbus OMS/LoRaWAN® radio module with automatic switch compliant with the OMS protocol, available in compact version, for multiple and single jet meters with wet dial, protected rollers, fully protected dial and superdry, MID approved with **K1** inductive predisposition and for Woltmann meters, MID approved, with **K10** predisposition from DN 50 to 125 and **K100** from DN 150.

## Model G2-IPS-S868WMB



### PRODUCT DESCRIPTION

#### **Model G2-IPS-S868WMB**

Radio module with 868 Mhz frequency, double stack Wireless-Mbus OMS/LoRaWAN® radio module with automatic switch Wireless-Mbus OMS transmission protocols for walk-by/drive-by, with the possibility of simultaneously transmitting data from 1 or 2 counters, 2 sensors and activating a device such as a solenoid valve or LED.

# UniFlo / SciFlo



**UniFlo** - OMS compliant diaphragm smart gas meter. Excellent accuracy, using error curve correction. AES encrypted data communication. Datalogger for readings, alarms, and events. Built-in valve for remotely closing and safe opening of gas flow. Low power consumption enables battery lifetime of min. 15 years. ATEX approved for zone 0/1. Over The Air (OTA) Upgrade supported. Range of UniFlo smart gas meters cover from G4 to G25, mono-pipe and two-pipe. Supports wM-Bus and ZigBee.



**SciFlo**® - OMS compliant ultrasonic smart gas meter (2023). Small and compact meter, which fits even in the most confined spaces. Static meter with no moving parts. Noiseless operation. IP 67 allows for both indoor and outdoor installation in semi-concealed meter boxes.

Excellent accuracy using error curve correction. AES encrypted data communication.

Datalogger for readings, alarms, and events.

Built-in valve for remotely closing and safe opening of gas flow.

Low power consumption enables battery lifetime of min. 15 years.

ATEX approved for zone 0/1. Over The Air (OTA) Upgrade supported.

Range of SciFlo® smart gas meters cover G4, G6 and a combined G4/G6. Supports ZigBee, NB-IoT (2023) and wM-Bus (2023)

## RelAir<sup>R2M</sup> PRO



The **RelAir<sup>R2M</sup> Pro** is a wM-Bus to M-Bus gateway and allows you to integrate up to 63 Wireless M-Bus meters into your existing M-Bus installation.

- Visit [www.relay.de](http://www.relay.de) for full information
- Wireless M-Bus to M-Bus and USB gateway
- wM-Bus according to EN 13757-4 Mode S, T und C
- Frequency 868 MHz
- OMS conform and compatible (Spec 4.X.X)
- supports M-Bus application layer acc. to EN13757-3
- Optional encryption Mode 5 or 7, AES
- Power supply via M-Bus (6 unit loads) or USB
- Whitelist with up to 63 meters configurable
- Configuration with free Software via M-Bus or USB
- Internal antenna
- Pro version with robust housing for rough conditions

## RelAir<sup>R2M</sup> Home



The **RelAir<sup>R2M</sup> Home** is a wM-Bus to M-Bus gateway and allows you to integrate up to 63 Wireless

M-Bus meters into your existing M-Bus installation.

- Visit [www.relay.de](http://www.relay.de) for full information
- Wireless M-Bus to M-Bus and USB gateway
- wM-Bus according to EN 13757-4 Mode S, T und C
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- Optional encryption Mode 5 or 7, AES
- Power supply via M-Bus (6 unit loads) or USB
- Whitelist with up to 63 meters configurable
- Configuration with free Software via M-Bus or USB
- Internal antenna
- Home version with elegant housing for living rooms

## PadPuls M2W



The **PadPuls M2W** is a 2 channel OMS conform pulse to wM-Bus converter.

- Visit [www.relay.de](http://www.relay.de) for full information
- Wireless M-Bus according to standard EN 13757-4 Mode S, T and C
- OMS conform and compatible (Spec 4.X.X)
- Optional encryption Mode 5 or 7, AES
- Two separated pulse inputs (for reed contacts, optocouplers,...)
- Save detection of up to 18 pulses per second on both inputs
- Debouncing
- Free adjustable pulse value
- Free choice of units (e.g. Wh, kWh, MWh, kJ, m3, l,...)
- Configuration via USB-converter cable
- Transmission interval adjustable between 10 seconds and 2 hours
- Battery supplied
- Battery lifetime about 14 years at 15min transmitting
- Distributionbox for wallmounting

## WebLog<sup>250</sup>

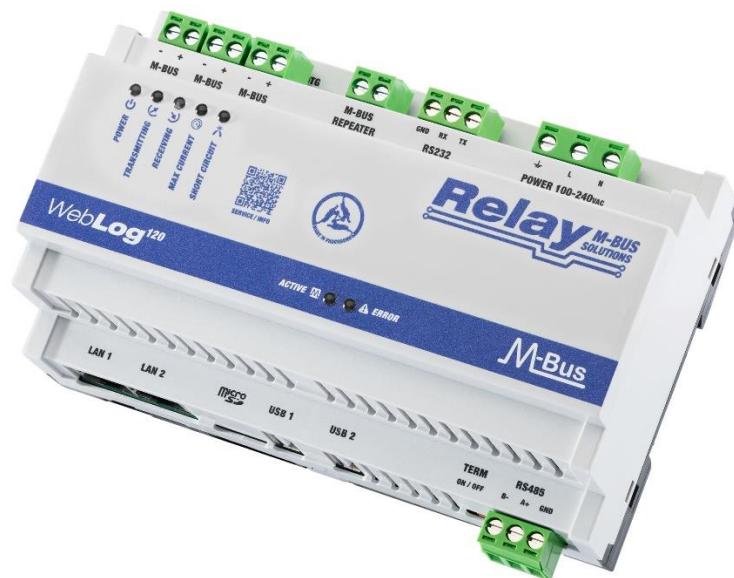


The **WebLog<sup>250</sup>** is an M-bus Datalogger with integrated web server for 250 meters with large touch display for use on site. The internal database allows you to organize the M-Bus data in a structure which fits your requirements. Another convenient feature is the automatic export of data via email or FTP upload. In addition to the standard interfaces (USB, RS-232C, Ethernet) the customer can also add a WiFi option. Due to three different user types, it is possible to send individual meter readings to for example tenants once a month or the energy controller once a day.

- Visit [www.relay.de](http://www.relay.de) for full information
- Web enabled M-Bus Logger for 250 meters
- Ideally suited to work with **RelAir<sup>R2M</sup>** wM-Bus Gateways
- USB, Ethernet, WiFi and RS232C interface
- Readout and administration by webbrowser
- Exports data as XML, XLSX or CSV via E-Mail, FTP or USB
- 4 GB internal memory
- integrated 110 .. 250 VAC power supply
- 3 different user types for different access levels
- Automatic monthly export of meter readings per tenant possible (EED)



## WebLog<sup>120</sup>



The **WebLog<sup>120</sup>** now brings the full convenience and performance also to smaller installations. The M-Bus logger WebLog120 has an integrated web server, 4GB memory and adapts to your needs as flexibly as the WebLog250. The WebLog120 can supply M-Bus 120 meters with power and voltage and manage up to 1,000 meters. With the help of the implemented database, your data can already be structured individually in the central unit. A particularly convenient function is the automatic export of the read data via email or FTP upload. In addition to the standard interfaces (USB, RS232C, Ethernet, RS485, repeater), WiFi is also available as an option. Thanks to the integrated double LAN interface and the repeater input, very individual installations can be realized, for example with a second controller or with a second M-Bus master.

- Visit [www.relay.de](http://www.relay.de) for full information
- M-Bus logger for 120 meters
- Integrated web server allows complete operation via web browser
- USB, Ethernet, W-LAN, RS232C, RS485, repeaters
- Data export as XML, XLS, CSV via email, FTP, USB or download
- Firmware update via web browser
- Compact dimensions and top-hat rail mounting
- Automatic, monthly export of meter readings per tenant possible (EED)
- Repeater input enables dual operation with a second M-Bus master

## PF meter DCI



### PRODUCT DESCRIPTION

Der Fiorentini-Kommunikationsadapter ermöglicht eine einfache, robuste und kosteneffektive Anbindung von Fiorentini Balgengaszählern an die LMN-Schnittstelle des Smart Meter Gateways.

Der Kommunikationsadapter wird über die Impulsschnittstelle mit dem Zählwerk des Zählers verbunden und mit einer zusätzlichen Plombe sicher fixiert. Die Kombination aus Zähler und Kommunikationsadapter wird vollständig parametrierbar geliefert. Eine Nachrüstung im Feld ist ebenfalls vorgesehen.

#### Technische Details:

- ❖ Kommunikationsadapter für die Impulsschnittstelle
- ❖ Gemäß DVGW G694, TR3109-1, PTB 50.8
- ❖ Unterstützt TAF1 & TAF6
- ❖ Wireless M-Bus 868MHz, unidirektional, Mode T/ Mode C
- ❖ OMS-Protokoll (4.1.2, Security Profile B, Encryption Mode 7)
- ❖ Sendeintervall 4min, >20 Jahre Batterielebensdauer
- ❖ Schlüsselversand über elektronischen Lieferschein
- ❖ Parametrierung über NFC
- ❖ Nachrüstung vorgesehen

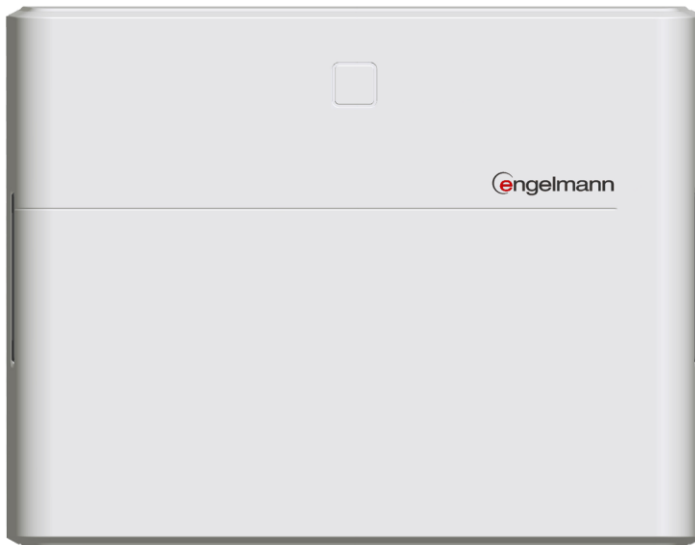
## SensoStar U



Ultrasonic BTU Meter  
 OMS Profile A & B approved  
 LoRaWAN® Certified  
 Flexible communication by modularity  
 Detection of back flow and air  
 Dynamic measuring cycle

Communication interfaces:	wireless M-Bus; M-Bus, Pulse, LoRa, ModBus,
NB-IoT	
Accuracy class (MID)	class 2
Nominal pressure (PN)	16 bar
Temperature range medium heat	15 – 90 °C
Temperature range medium cooling	5 – 50°C
Temperature difference range $\Delta\Theta$ heat	3 – 100 K
Temperature difference range $\Delta\Theta$ cooling	-3 – -50 K
Minimum temp. difference $\Delta\Theta$ heat	> 0,05 K
Minimum temperature difference $\Delta\Theta$ cooling	< -0,05 K
Resolution temperature	0,01°C
Measuring cycle temperature; dynamic	2 / 60 sec
Units	MWh, kW, m <sup>3</sup> , m <sup>3</sup> /h (kWh, GJ, MMBTU, Gcal)
Power supply	exchangeable 3 V lithium battery; main supplies
Battery lifetime	10 years
Data storage	nonvolatile memory
Protection class	IP65
EMC	EN 1434
Temperature sensors (2-wire technique)	Pt 1000

# Engelmann Connect Gateway



Gateway with open system, according to wireless M-Bus and OMS

Number of devices in battery mode: up to 1000

High density wireless M-Bus receiver (LTE disturbance filter)

Compatible with OMS radio devices

10 years battery lifetime

Remote configuration

GPRS or Ethernet available

Interface/Communication: USB or Portal for configuration  
Wireless M-Bus for data collection  
GPRS for data forwarding, firmware update

Output file format CSV; XML; RAW  
Data transmission e-mail dispatch; FTP upload

Ambient temperature - 20 to 60 °C  
Protection class IP65  
Power supply 1 or 2 batteries; Main supplies, PoE

AMR software automated data preparation, merges multiple input files

# Engelmann Connect Gateway

## Technical data:

Interfaces (standard)	USB wireless M-Bus GPRS	(configuration); (data collect); (data forwarding, firmware update)
Output file format Data transmission	CSV; XML; RAW e-mail dispatch; FTP upload	
AMR software (optional)	automated data preparation, merges multiple input files	
Ambient temperature	°C	- 20 to 60 (battery powered);
Protection class	IP65 (GSM)	
Power supply	1 or 2 batteries; Mains	

Number of devices	Format	SMS	Frequency of data collects	Frequency of uploads	Lifetime
400	RAW	Daily 15 min	3 x a month	3x a month	10 years
1000	RAW	Daily 15 min	2 x a month	2x a month	10 years
400	CSV	Daily 15 min	2 x a month	2x a month	5 years
200	XML	Daily 15 min	2 x a month	2x a month	5 years

### **Wireless M-Bus**

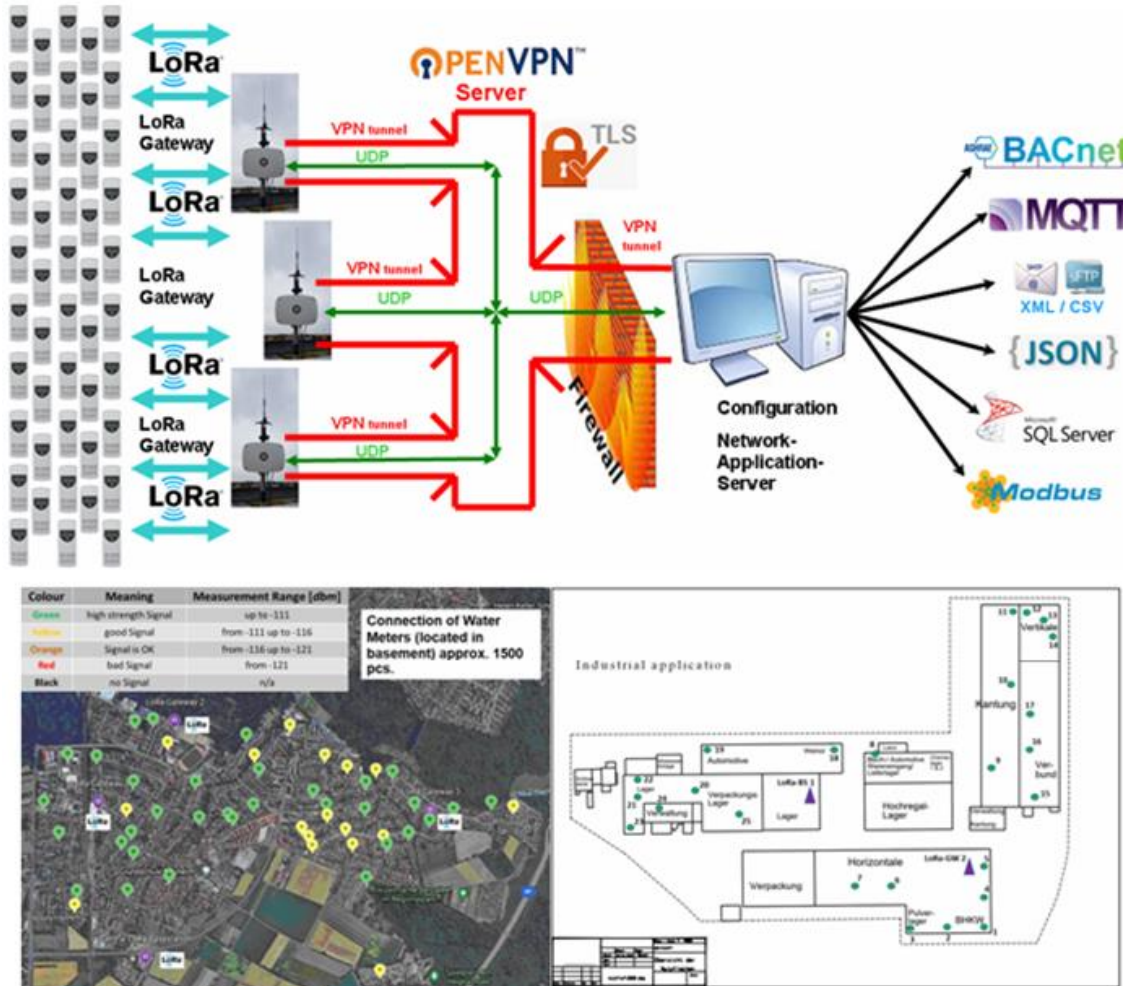
Frequency	MHz	868
Protocol	wireless M-Bus according to EN 13757-3, -4	
Selectable modes	T1; C1; S1	
Telegrams	short telegram for AMR (according to OMS 2.0.0, 3.0.1, 4.0.2); long telegram for walk-by read-out	
Encryption	AES: Advanced Encryption Standard; 128 bit: key length	

### **GSM/GPRS**

Frequencies	MHz	850, 900, 1800, 1900
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## Private LoraWAN Networks



The LoRaWAN Network is an extension of the existing MiDASS / RmCU concept to connect consumption meters and smart city sensors with LoRaWAN interface to head end systems.

The System can be used to build up private LoRa-Networks that do not require any cloud server.

There are no monthly costs for sensor management or data points

The Lora Basestations and Gateways can be combined with wM-Bus (OMS 3+4), M-Bus, Modbus, and BACnet interfaces. Mobile modems (4G, 5G or 450 MHz) are directly integrated

LoRaWAN end devices class A (sensors such as water meters) and class C (actuators such as switches) are supported. In addition to classic LoRaWAN Payloads there is a wM-Bus/OMS over LoRa decryption implemented.

## iSmart2



# iSMART2

The UG iSMART2 series meters are the 2<sup>nd</sup> generation of smart gas meters of Apator Metrix, being the base for many smart gas meters project in Europe and beyond. The design uses proven and durable diaphragm measuring principle with low power, solid state Hall effect sensors for volumetric measurement. The volumetric measurement principle is highly convenient for changing composition of gases in the networks. The iSMART2 electronic index can be integrated with each meter within our product portfolio to add proven measurement with smart functionalities like shut-off valve, communication and Graphical User Interface. The device uses microkernel-based, real-time operating system ensuring flexibility and security in rising IoT world.

## uniSmart2



# uniSMART2

**uniSMART2** is a communication module, pre-mounted & configured on new gas meters or as a retrofit module for already installed gas meters of Apator Metrix. The robust uniSMART2 has smart solid-state sensors for volumetric measurement of values of the mechanical index of the diaphragm gas meter. The sensors detect possible return flow and secure against "false pulses". Index values and events as tampering and overflows are logged and communicated following 868 MHz Wireless M-Bus (cooperates with devices working in OMS standard), T-mode, security mode 7, profile B in the M-Bus telegram. A lifetime of battery mounts up to 20 years, communicating every 5 minutes. Communication is compliant with German BSI specifications. For retrofit modules on installed gas meters, Apator has developed a special tool for easy and fast installation.



# ULTRIMIS



The ULTRIMIS ultrasonic water meter of Apator has been OMS certified by DVGW in May 2021.

DVGW confirmed that radio communications compliance with OMS requirements: Encryption mode 7 - Profile B and Encryption mode 5 Profile A (selectable).

Both synchronous and asynchronous radio frames meet OMS standards in the version chosen by the customer.

ULTRIMIS will also be available with dual stack communications on board: LoRaWAN and wMBus, where wMBus communications will meet OMS Encryption mode 5 - Profile A standards.

Very important argument for customers for using OMS-compliant ULTRIMIS water meters is the data security. It is provided among other things by a unique 128-bit AES key and free access to data transmitted by the water meter, such as current volume, stored volume, backflow volume, battery status and tampering.

## SHARKY 775



## HYDRUS 2.0 DOMESTIC



**Diehl Metering** provides **smart metering solutions** to utilities companies through the intelligent networking of various metering devices into larger data platforms. These solutions offer transparency for utilities and municipalities, and enable considerably increased efficiency in reading, billing and service processes.

### **HYDRUS 2.0 DOMESTIC**

HYDRUS 2.0 DOMESTIC is a static water meter operating on ultrasonic measuring technology. This technology enables accurate calculation of water consumption with long-term stability and eliminates measuring deviations caused by sand, suspended particles, scale or air pockets. Its integrated radio based on Open Metering telegram (OMS Generation 3 or 4, Profile B) enables remote reading of the meter's index and alarms both in mobile (walk-by, drive-by, passive drive-by) and fixed network mode. HYDRUS 2.0 DOMESTIC offers a wide choice of connectivity with an excellent coverage for large areas with less receivers and high data granularities and timeliness, which makes high responsive networks to take actions immediately.

### **SHARKY 775**

SHARKY 775, a smart ultrasonic energy meter, gives accurate measures for heating or cooling applications. Its excellent interoperability with an integrated radio based upon the compatible Open Metering System (OMS - Version 4, Profile B) enable you to fulfill data security requirements. Compatible with remote reading solution such as walk-by, drive-by or passive drive-by, it can be also upgraded to a fixed-network at any time – without additional meter configuration.

Further information at [www.diehl.com/metering](http://www.diehl.com/metering)

## WECOUNT



The devices from the WECOUNT family manufactured by E. Wehrle GmbH stand for premium solutions in the field of metering potable water. The fully integrated electronic water meter reliably records even the smallest consumption. It can be used with a variety of hydraulic connection housings for communal applications as well as in the submetering sector. Thanks to the high IP68 protection code, the register can also withstand high humidity and is resistant to temporary submersion.

In addition to the current register value, the LC display provides additional helpful information such as the current flow rate or status codes when unusual consumption is detected. This includes leaks, pipe bursts and magnetic manipulation attempts, providing valuable information in the event of faults in the pipe system, among other events. The radio standard with a frequency of 868 MHz according to OMS offers the transmission modes C1, T1, with or without monthly end values. This makes the device suitable for walk-by/drive-by solutions as well as for automated meter reading within a fixed network. The water meters of the WECOUNT family are equipped with encryption according to OMS Security Mode 5 and 7, which fulfils requirements for system solutions in combination with smart meter gateways. Alternatively, the meter can be ordered with data transmission via LoRaWAN. Furthermore, the register is available with different battery capacities (Up to 16 years) to suit the requirements for the lifespan of the meters.

In terms of operation, the device has been designed to make commissioning and parameterisation as simple as possible. The desired parameters can be chosen within an online configurator at the time of ordering and the meters will be delivered with the chosen parameterisation, simplifying the commissioning. After installation, no manual activation is required, as the meter independently switches to operating mode by means of flow detection. The WECOUNT series can be read out and parameterised via the NFC interface and the associated Android app, or by means of associated hardware (NFC head). This allows the operator to easily and quickly access the stored consumption data or adjust the radio settings. The WECOUNT water meters are available as single-jet meters, measuring capsules and piston cartridge meters.



Single-Jet Dry Meter  
WECOUNT



Inline 500  
WECOUNT



config.wehrle.de

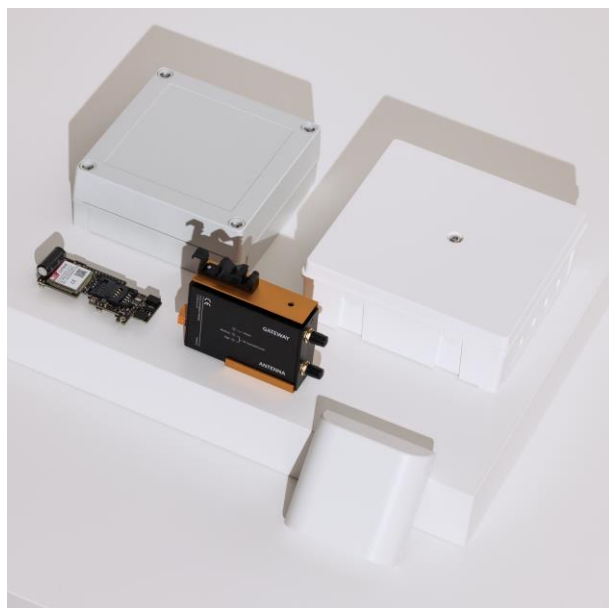
## ULTRAHEAT®T450



### Intelligent measurement technology for exceptional reliability

The ULTRAHEAT®T450 is a compact and at the same time flexible ultrasonic meter, which is suitable for many, especially demanding applications. Robustness, easy installation, on-site configurations, retrofitting of communication modules, sensors or power supply - these are just a few of the features that distinguish the T450. The new electronic design enables power supply via M-Bus and thereby an almost unlimited service life. The unique calibration logbook makes it possible to change the installation location, sensor type and energy unit at any time.

## Repeater



### *Lansen System AB*

*Lansen is a European hardware provider focused on metering and wireless solutions. We design and manufacture smart metering products mainly built on the Wireless M-BUS and OMS standard. We provide products with our own brand as well as customized OEM products.*

*Example of products in the portfolio are: Repeaters, CO2, Temperature & humidity, Leakage, Smoke detector, Occupancy detector etc.*

*Lansen also produces range extenders for increased range in the wireless network.*

Our mains or battery powered Wireless M-Bus (W-MBus) repeater is a highly configurable low latency plug-and-play repeater for extending the range between meters and gateways. Our repeaters either make use of high-performance dual internal antenna or support up to two external antennas for even greater range, depending on the model. Furthermore, our advanced collision avoidance algorithm minimizes problems with collisions and data repetition to ensure data from meters reaches gateways.

The devices support time synchronization according to OMS and configurable listen window and is therefore a perfect companion also to your battery driven GW solution.

To achieve maximum range, our repeaters can be used in a multihop system thanks to support of up to four jumps – All while still complying with the OMS Wireless M-BUS standard and supporting up to 930 meters.

The wireless configuration interface allows remote configuration and since the device every minute transmit a status message you can be sure that the device is up and running delivering data to you IOT solution.

The enclosure of the repeater has been designed to make it as discrete as possible to avoid sabotage. Furthermore, the enclosure meets the requirements for IP67, thus allowing the repeater to be mounted both inside and outside of buildings.

The low power consumption and high battery performance gives up to 10 years lifetime with daily readings with a listening window of 20 minutes per day.



**SOLVIMUS**  
METERING SOLUTIONS

## MUC.easy<sup>plus</sup>



**The data concentrators of solvimus have a compact design, feature diverse meter interfaces and whose intuitive and flexible software greatly facilitates the automatic capture of consumption data and load profiles in properties.**

As powerful data hub, the MUC.easy<sup>plus</sup> queries on its own data from sensors and meters of all sorts of media, analyses and transmits these. To achieve that, the MUC.easy<sup>plus</sup> disposes of an M-Bus interface supporting up to 80 unit loads. Additionally, three S0 pulse inputs can be read.

This is supplemented by a wireless M-Bus interface compliant with OMS and now also Modbus RTU via RS-485 as well as Modbus TCP for meter reading.

The connection to the data acquisition system via the MUC.easy<sup>plus</sup> is established by an Ethernet interface, alternatively also by LTE (4G).

With its support of diverse XML formats, the MUC.easy<sup>plus</sup> is compatible to numerous systems for automated meter reading (AMR) and energy data management systems (EDM). It also masters the data export to CSV or JSON files.

The data transmission itself can occur encrypted or unsecured via FTP, MQTT, SMTP (e-mail) and TCP to an energy management system, billing system or for visualisation purposes.



## **Q** gateway 5.5 direct

### **QUNDIS Gateway**

The Q gateway 5.5 direct enables the smart transition from walk-by meter reading to AMR remote readouts and is therefore ideal for small systems. The gateway receives data from all QUNDIS metering devices in C mode as well as wM-Bus compatible, uni-directional external meters from other manufacturers within the direct reception range.

The recorded consumption data from up to 1,000 metering devices are transmitted via 2G / 3G / 4G mobile radio transmission to the QUNDIS Smart Metering Platform (Q SMP). From there, the automatic data transmission by email or SSH FTP takes place at the desired interval directly to the metering service.

Thanks to its high-performance battery, the Q gateway 5.5 direct works without interruption throughout the entire contractual period. Depending on the operating scenario, a battery life of up to 10 years is possible. The product variant with power supply is the optimum solution for daily data retrievals.

**More information:** <https://qundis.com/products/network-nodes-gateways/>

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## Q caloric 5.5

### **Improved wireless transmission performance and flexible readout times**

The Q caloric 5.5 heat cost allocator enables an even simpler and more flexible readout of meters. The significantly greater wireless transmission range simplifies remote readout, improves data quality and cuts readout times.

Meter reading can be implemented both on site and in mobile form, because parallel to walk-by wireless telegrams Q caloric 5.5 also sends AMR telegrams. In C-Mode operation the AMR telegrams meet 'Open Metering System' (OMS) specifications. In addition, parallel transmission also makes it possible for you to switch to AMR readout at any time, without re-configuration of the Q caloric 5.5. As a result you are well prepared for consumption recording at any time of year.

**More information:** <https://qundis.com/products/heat-cost-allocators/>





## Qwater 5.5

### Electronic water meters

The MID-compliant Q water 5.5 meters represent a new generation of the tried-and-tested water meters from QUNDIS. The Q water 5.5 doesn't just reliably measure the consumption of cold and hot water in the building – it identifies leaks and transmits all its data by radio also. These features enable the provision of valuable useful additional services.

Remote meter reading can be implemented either on site or in mobile form, because in addition to walk-by radio telegrams the Q water 5.5 also transmits AMR telegrams. In C-Mode operations the latter also conform to the requirements of the Open Metering System (OMS). In addition these parallel transmission operations ensure that you can switch to AMR readout at any time and without any reconfiguration, e.g. if you wish to use the leak detection function.

**More information:** <https://qundis.com/products/water-meters/>



## Qheat 5.5 US R

### Radio integrated ultrasonic heat meter

The new ultrasonic heat meter combines precision, high material quality and easy handling during installation with integrated radio technology.

Thanks to the high level of metering accuracy with a dynamic range of up to 1:100, even the smallest flow rates are recorded precisely, which is also ideal for separating out hot water.

The familiar, diverse range of applications has been expanded to include combined heat/cooling meters. For recording the energy consumption of heating, cooling and hot-water heating systems, there are screw-type meters available in the flow rates 0.6 / 1.5 and 2.5 m<sup>3</sup> /h.

Thanks to the compact design and the removable calculator unit as standard, the Q heat 5.5 US R is ideally suited for installation situations where space is limited or access is difficult. The installation position can also be selected as desired, which means that overhead installation is also possible without any problems. In addition, it is possible to switch between flow and return on site, without having to change the temperature sensors, as well as between the energy units (GJ - MJ <-> kWh - MWh).

The device parameters are set in a user-friendly way via the IR interface using software, or directly via the device keys. All ultrasonic heat meter variants can also be ordered with optional AES encryption; decryption is possible on request within the Q SMP on a tariff basis.

**More information:** <https://qundis.com/products/heat-meters/#qheat5.5usr>

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## Gas meter adapter CHENOA



Communication adapter for Elster gas meter with pulse interface (Retrofitting) for wireless remote reading with OMS over wM-Bus & OMS over mioty.

## Gas meter adapter JONAH



Absolute Encoder (AE5) communication adapter for Elster gas meter (Retrofitting) for wireless remote reading with OMS over wM-Bus & OMS over mioty.

## **ELECTO SJ**

**ELECTRONIC SINGLE JET METER**



### **ELECTO SJ**

**ELECTRONIC SINGLE JET METER**

*Electo SJ is a single jet meter offering built-in data communication thanks to its innovative electronic register. It is available for both cold and hot water applications and its large LCD display makes it very easy to read. Electo SJ is equipped with a wireless M-Bus, OMS radio and allows remote data reading with both mobile and fixed systems, fully responding to the requirements of the European Directive on energy efficiency. OMS Certificate of Conformity n. 22-00062-AB01-439.*

**Scan the QR code and discover the full ElecTo product range including also Volumetric and Static water meters.**

## EQUOBOX RTUEVO



## EQUOBOX SMART GATEWAY



Sinapsi is expert in smart metering.

EQUOBOX is the tool for Energy Managers, Condominium Administrators, Facility Managers, Utilities, able to meter for the energy and resources of a building, allowing the allocation of operating costs in accordance with UNI 10200. It is available in different solutions based on the combination of LEVEL CONVERTER, DATALOGGER, GATEWAY devices.

### EQUOBOX RTUEVO

M-Bus/Wireless M-Bus DATALOGGER of the EQUOBOX system. System for acquisition and storage of data from W.M-Bus 868 MHz/OMS EN13757 radio (through concentrators with Mesh Network technology) / cable. Through a web interface, it allows the reading of the meters, the generation of reports, the setup, and the consultation of the historical readings. Integrated graphic display for setup and data reading. Allows the storage of daily readings for 10 years. Supports up to 2500 radio meters and 500 on two separate M-Bus lines (up to 20 meters via integrated M-Bus port). Compatible with the highest IT security standards through encrypted protocols (https, SSL use for data transfer and sending). SGH-compliant. Integrated SGHNET reachability service. 24V AC/DC power supply.

### EQUOBOX SMART GATEWAY

Data concentrator that allows the acquisition of signals from RF devices according to the W.M-Bus 868 MHz/OMS EN13757 standard. Supports Wireless M-Bus S, T & C modes. It is equipped with an integrated GPRS modem. It can manage up to 500 transmission devices and different transmission periodicity (weekly, daily, hourly, quart hourly). Supplied with integrated SIM CARD. Supplied with n°1 year, the annual rate for sending reports with data and alarms (according to selected profile). Configurable via Sinapsi Global Hub, IoT Platform. SGH-compliant. Power supply 230V 50Hz.

## CMe3100 - M-Bus Metering Gateway



## CMeX50 - Wireless M-Bus Receiver



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

CMe3100 from Elvaco is an M-Bus Metering Gateway for Fixed Network that 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. It is compatible with all meters that use the M-Bus standard protocol and Elvaco's CMe/CMEx Series. CMe3100 is easily configured and updated through its web interface and supports a wide range of integration protocols, such as ModBus, DLMS, JSON and REST, which makes it a viable solution for many different types of metering projects. Through the continuous readout feature, meter data can be delivered in real-time, which might for example be used in an automatic control system. CMe3100 is equipped with a flexible licensing scheme, which allows for a cost-effective customization at the purchase point as well as the possibility to later extend the product functionality without changing the hardware.

## CMeX50 - Wireless M-Bus Receiver

CMeX50 from Elvaco 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.

## Meter Connectivity Modules for LoRaWAN communication OMS over LoRaWAN: One platform - Any meter



### Meter Connectivity Modules for LoRaWAN communication OMS over LoRaWAN: One platform - Any meter

Elvaco provides Europe's largest portfolio of heat meter connectivity modules to all leading meter manufacturers.

The solution enables LoRaWAN readings of your heat meters from Landis+Gyr, Kamstrup, Diehl Metering, Engelmann or Itron with the same platform.

- World class security
- Digitalized lifecycle
- Extendable features with firmware upgrade
- One system integration



## PiiGAB M-Bus 900S and PiiGAB M-Bus 900T

PiiGAB M-Bus 900S and 900T is a M-Bus gateway/converter developed for remote reading of M-Bus meters with up to four clients simultaneously. The remote reading can be done using local network, city network, internet, serial communication or via two existing M-Bus masters. It is also possible to parallel connect a Modbus client to read values from a M-Bus meter to a PLC/DUC or to be shown on a local display.

The PiiGAB M-Bus 900S gateway is designed to transparently read all type of meters which support the M-Bus standard (EN13757), and it translates the electrical signals of M-Bus to respective clients. No damage is done in the transparent M-Bus message in the gateway and the message leaving any of the four ports is the original message, which can be sent e.g. to a database for further handling.

PiiGAB M-Bus 900S and 900T is available with 5, 20, 60 or 120 M-Bus loads. There are four parallel M-Bus master terminals using the same physical interface. PiiGAB M-Bus 900S is available with 2 or 4 clients, as well as with a supplementary module for M-Bus ASCII and Modbus RTU/TCP slave input.

You also have the opportunity to export meter values directly to a FTP-server, a HttpPost server or MQTT with our application QuickPost.

You can read Modbus meters from an M-Bus system with our Modbus2Mbus application.

With Wireless card addition to the PiiGAB M-Bus 900S wireless M-Bus meter can be read in an M-Bus system.





## Ei6500-OMS

The Ei6500-OMS alarm has been specifically designed for larger residential properties and can be fully inspected from remote.

The remote inspection of the alarm is enabled by the unidirectional wM-bus module. On 868.95 MHz, it transmits the following status information of the detector per radio within 120 second intervals:

Manufacturer ID; Serial number; Date of commissioning; Operating time; Battery, sounder and sensor status; Degree of soiling of the smoke chamber; Incidents since the last read out: Test button pressed, alarm, disassembly (frequency and duration); Detector removed.

The smoke alarm operates according to the scattered light principle and triggers an alarm as soon as smoke penetrates the optical smoke chamber. The built-in piezo-electric horn alerts with a sound pressure of at least 85dB (A) three meters away.

### Features:

- Smoke alarm according to DIN EN 14604 with additional functions and complete remote inspection
- 10-year lithium battery (3V)
- Ultrasonic smoke entry obstacle detection system
- Reading of detector data by wireless M-Bus module
- Integrated microprocessor
- Test and mute button
- Advanced mute function
- Increasing test volume
- Dust compensation
- Silent standby
- 5 year warranty
- 10 + 1 years product life

## TOPAS® Sonic Ultrasonic Meter / CALEC® ST III Standard & Smart



### TOPAS® SONIC

Our TOPAS® SONIC is an ultrasonic water meter for domestic applications. As a smart metering solution, it enables remote data readout via LoRaWAN® and wM-Bus. Thanks to its brass pipe with free-flow design, not only does it feature high mechanical robustness, but there are no mechanical parts in the pipe. Hence, the TOPAS® SONIC offers the highest possible resistance against bacteria or dirt adhesion.



### CALEC® ST III Standard & Smart

The CALEC® ST III Standard & Smart is a multifunctional heat and cold calculator for applications in local/district heating and building technology. The calculator provides accurate meter measurements remotely and enables bidirectional energy measurement, namely cooling and heating measurements in the same device. Thanks to its large panel of communication technologies, its modularity is beyond optimal.

## SMART ULTRASONIC WATER METER QALCOSONIC W1



### SMART ULTRASONIC WATER METER QALCOSONIC W1


Ultrasonic water meter **QALCOSONIC W1** is designed for accurate measurement of water consumption in households, apartment buildings, and small commercial premises, where low flow sensitivity is important. This smart water meter with a durable composite flow body part is packed with the latest IoT communication technologies. It is an ideal solution for saving up on investment, improving operational efficiency, and ensuring every drop of water is counted.


- Static method of water consumption measurement, no moving parts.
- High accuracy calculation of water consumption.
- Eliminates measuring deviations caused by sand, suspended particles, or air pockets.
- Long-term measurement stability and reliability.
- 9 digits, multi-line LCD. Total volume and instantaneous flow rate indication.
- Sensitive and accurate in low flows, down to 1l/h.
- Ready for AMR with NFC, wM-Bus, LoRa, NB-IoT and Sigfox (up to DN32) technologies.

For more information, please visit "Axioma Metering" booth No.: 12.1.G180

## Billing system - arasys

KONTAKT NEWS


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**arasys**  
**ABRECHNUNGSSYSTEME AUS DER PRAXIS:**  
 DIGITAL – INNOVATIV – SYMPATHISCH

MEHR ZUM THEMA

● ○ ○ ○ ○

### Solutions



**ara.mobile**

Automatisiertes  
Geräte und  
Datenmanage-  
ment



**ara.billing**

Digitale  
Heizkostenab-  
rechnung und  
Energieausweis



**ara.office**

Effiziente  
Officelösungen  
und  
Schnittstellen



**ara.web**

Cloudbasierte  
Service und  
Anwendungs-  
plattform

### Benefits

- 30 Jahre Branchen- und Software Know-How - Made in Germany
- 1 Mio. Abrechnungen pro Jahr
- Maximale Effizienz durch Digitalisierung und Automatisierung vom technisch führenden unabhängigen Systemanbieter
- Maximale Flexibilität bei der Geräteauswahl durch offene Schnittstellen (zB. OMS)

- Mehrstufiger Support, Fachschulungen und individuelle Beratungsleistungen
- Optimaler Einstieg durch Datenmigration und Unterstützung vom Transferenteam
- Zuverlässigkeit durch 30 Jahren Branchenerfahrung
- 1 Lösung - 1 Ansprechpartner - Alles aus einer Hand

GMDM-I\_AF+TX3



HYDROSONIC-M1



GSD8-I+TX5



- **HYDROSONIC-M1**: Ultrasonic water meter designed for measuring of cold water consumption in households, blocks of flats and for industrial applications.

- High accuracy up to R500 (Q3/Q1)
- Mounting in any installation position
- No measurement of air
- Wireless M-BUS integrated transmission module

- **HYDRODIGIT-S1**: Single jet, digital display with 8 digits Inductive transmission. Produced in the versions for cold water and hot water in the diameters DN15 and DN20 mm (1/2" - 3/4"). 360° rotating dial. Wireless M-BUS integrated transmission modules.

- **IWM-TX5**: The IWM-TX5 is a radio module applicable to the single jet , dry dial GSD8-I water meters.

Easy to install and configurable trough NFC. In addition to the actual consumption and up to 12 months of historical values, it can detect several fraud attempts against the meters, maximum flow rate exceeded and leakage.

- **IWM-TX3**: The IWM-TX3 is a radio module applicable to our multi jet, pre equipped water meters like the GMDM-I.

Easy to install and configurable trough NFC or with Radio. In addition to the actual consumption and up to 12 months of historical values, it can detect several fraud attempts against the meters, maximum flow rate exceeded and leakage.

## MULTICAL® 21



### Ultrasonic water meter for residential use

- + Ultrasonic precision from the very first drop
- + Superior stability in the entire dynamic range
- + Innovative acoustic leak detection
- + Intelligent info codes and alarms

MULTICAL® 21 is an ultrasonic water meter optimised for residential use. Contrary to traditional mechanical meters, MULTICAL® 21 is a static meter protected against water ingress with no moving parts. Therefore, it maintains a high and stable accuracy throughout its lifetime of up to 16 years. MULTICAL® 21 has a very low error margin, an industry-leading accuracy and an optimised low start flow which ensures that even the smallest consumption is measured accurately.

MULTICAL® 21 comes with built-in communication and the remote reading is handled easily through either a drive by solution or a fixed network. This significantly decrease the data collection time and avoids time-consuming follow-ups on lacking or imprecise readings.

Intelligent alarms from the ultrasonic water meter detect leaks and bursts or other irregularities such as tampering attempts or reverse flows quickly and effectively. This limits water loss as well as any collateral damage and ensures a more proactive customer service.

OMS certification Generation 4 Security Profile A / B

## PolluCom F



Compact mechanical thermal energy meter

District Heat / Industry Heat

Commercial Heating / Cooling (HVAC)

Domestic Warm Water Generation / Charging Systems

The compact PolluCom F mechanical meter measures energy consumption in heating or cooling circuits. Thanks to its high-precision flow sensor, the application range stretches from district heating stations to consumption billing for individual apartments.

It is equipped with a large comprehensive LC display with programmable screens.

Benefits to you

- Wireless M-Bus certified according to OMS 4.0.2 standard Profile A/B for EED (Energy Efficiency Directive) compliance
- Optional communications easy to be integrated to different reading and billing programs
- Battery lifetime up to 13 years
- Big size storage of the historical data
- Ideally applicable for “6/12 °C cooling systems” due to temperature range of the flow sensor from 5 to 90 °C
- Updates measuring values quickly (4 seconds for temperatures, 4 seconds for energy and flow rate)
- Optional, factory-fitted modules for electronic meter reading and connection with building automation systems
- Can be used with water glycol mixtures due to mechanical measuring principle
- Provides a pre-settable correction factor for enthalpy for usage in water glycol systems

## iPERL



Static electromagnetic meter with remanent magnetic technology

Intelligent technology meets water management

Whether internet, telephony or electricity - intelligent network communications are all around us and offer almost unlimited possibilities. So why not apply the same principle to one of our most important resources - water.



## PolluStat



Compact ultrasonic thermal energy meter  
District Heat / Industry Heat  
Commercial Heating / Cooling (HVAC)  
Domestic Warm Water Generation / Charging Systems

The compact PolluStat ultrasonic meter measures energy consumption in heating or cooling circuits. Thanks to its high-precision flow sensor, the application range stretches from district heating stations to consumption billing for individual apartments.

It is equipped with a large comprehensive LC display with programmable screens. The following modules for remote readout and data communication are available as options and can be retrofitted:

- Wireless M-Bus according EN13757-4
- Wired M-Bus per EN 1434-3 with arbitrary readout frequency, the values update every 2 min.
- Wireless M-Bus and 3 pulse inputs for consumption meters with remote meter pulse output
- M-Bus per EN 1434-3 and 3 pulse inputs for consumption meters with remote meter pulse output
- Pulse output