

Leak Detection and Water Supply Network Monitoring

868 MHz



sebaKMT
by Megger®

Your Water Network Always in View

Billions of people need to be supplied with potable water every day. The early detection of leaks plays a central role for every water supplier and service provider so that they can guarantee a reliable supply for their customers.

In many parts of the world, leaks are caused by outdated pipe networks, inadequate maintenance, material wear and tear or overuse:

the water, which has been treated at great expense beforehand, escapes in huge quantities without reaching the consumer. The consequences are supply failures and increased production costs as well as immense secondary damage. This is why every minute counts when it comes to localising burst pipes and leaks. Reliable equipment that facilitates accurate measurements, is simple and quick to operate and can be used at any time anywhere is necessary.

With decades of experience in the production of leak detection systems, SebaKMT offers a comprehensive product portfolio, ranging from the early detection of leaks to the quantification of losses and the precise detection of leaks.

Ease of use and reliable and precise measurement results have always been the focus of our SebaKMT products.

sebaKMT
by Megger®



NOISE LOGGER NETWORKS

SmartEAR	08-11
Sebalog N-3	12/13

PRESSURE AND FLOW MEASUREMENT

Sebalog D-3	16/17
Sebalog P-3-1	18/19
Sebalog P-3-Mini	18/19

ULTRASONIC FLOW MEASUREMENT

Temporary Installation	20/21
UDM 300	
UDM 500	
Permanent installation	22-27
UDM 501	
SebaFlow Classic	
SebaFlow-BAT	

INNOVATION



SmartEAR

Next-generation IoT logger for permanent monitoring and leak detection



CORRELATION

Correlux Familie 30-33
C-3 & C-30

LINE DETECTION

Ferrolux 48/49
Carloc 50
Easyloc 51
Pipe knocker RSP 3 51

ACOUSTIC AND TRACE GAS DETECTION

HL 50-BT 34/35
HL 7000 & HL 700 36-39

FURTHER INFORMATION

SebaKMT water measurement van 54/55
Accessories 56-59
Contact / Sales contact 62/63

WEB SOFTWARE (CLOUD SOLUTION)

POSEYEDON 42-45



POSEYEDON

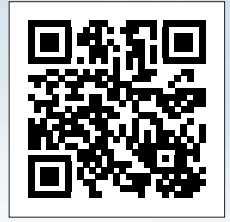
Your water network always in view



Monitoring



Monitoring
Video





SmartEAR

IoT noise logger for permanent monitoring and leak detection

- Read out and installation over SmartEAR-GO! app
- Automated data transfer to POSEYEDON
- Real-time measurement
- Built-in reception test
- Pre-installed nano SIM card
- Manual upload of the audio files possible



Seba pro tip:

Real-time measurement makes it easier for you to detect possible leaks during the installation and take further steps!

Technical Data	
Dimensions: height diameter	115mm (122 mm with antenna) 69 mm (79 mm max.)
Weight	450 g
Power supply	Lithium-Batterie 3,6 V / 13 Ah
Max. battery life	Up to 9 years
Operating temp.	-20° C to +70° C
Radio performance	10 mW
Communication	NB-IoT, LTE-M, Bluetooth® Low Energy

SmartEAR – Latest Generation Noise and Frequency Logger

The supply of potable water is essentially all about quality and efficiency. Modern measuring and detection technology offers powerful instruments to efficiently monitor drinking water networks for leaks and by safeguarding the water supply on a permanent basis through continuous online monitoring.

SebaKMT is to be launched in 2022 with a completely revised noise and frequency logger concept. To this end, the product management team at SebaKMT identified the most important requirements for our customers worldwide, including technical performance, battery life, maintenance, ease of handling, quick installation - even for large unit numbers - and attractive acquisition costs, then combined these with the most advanced technical solutions. The result shows up in the form of the SmartEAR IoT noise/frequency logger. Robust and durable housing materials paired with a powerful lithium-ion battery provide an operating time of up to 9 years. Installation can be reliably carried out in a few automated steps in the shortest possible time using the specially developed smartphone app SmartEAR-GO! Once in operation, the SmartEAR loggers use intelligent algorithms to identify and localise leaks in the drinking water network in the POSEYEDON cloud. Let SebaKMT convince you of our new generation of SmartEAR IoT noise loggers!

SmartEAR GO! Installation App

You can install any SmartEAR logger in just a few steps and in no time at all with guidance from the app. All you need is a smartphone or tablet and the Smart-EAR-GO! for Android or iOS. The app is available for download free of charge and, in addition to the installation routine, it offers several other helpful and smart functions including onsite real-time measurement, manual audio file uploading and an integrated reception test function.

Customise with the SmartEAR-GO! You can quickly and easily adjust settings such as measurement or upload times for the SmartEAR logger. When installing the SmartEAR logger, either assign it to an existing measuring point or create a new one. Discover the benefits of our new combination of SmartEAR, the SmartEAR-GO! app and the POSEYEDON cloud for yourself!



SmartEAR-GO!



SmartEAR	
Item Description	Item Number
SmartEAR, NB-IoT noise logger without SIM card*)	1014081
SmartEAR, NB-IoT noise logger with SIM card (Telekom EU)*)	1014081-001
SmartEAR, NB-IoT noise logger with SIM card (Vodafone)*)	1014081-002
SmartEAR, NB-IoT noise logger with SIM card (O2 Telefonica)*)	1014081-003
SmartEAR, NB-IoT noise logger with SIM card (Telekom EU extended)*)	1014081-004
SmartEAR, NB-IoT noise logger with SIM card (Telekom North America)*)	1014081-005
SmartEAR, NB-IoT noise logger with SIM card (Telekom Global)*)	1014081-006
*) With loop, rod antenna, magnet adapter and battery	

Matching accessories can be found on page 58



SmartEAR – App Features

DIVERSE FUNCTIONS

Installation routine, GPS management, real-time measurement, update management, etc.

RECEPTION TEST

Direct feedback about the network available and signal reception strength

MEASUREMENT PROFILES

Use standard measuring profiles, customise them or configure your very own in POSEYEDON

Deploy – or installation routine

After performing a Bluetooth scan for a SmartEAR unit, Step 1 involves the installation routine. Six individual steps follow in order to put a SmartEAR unit into operation with maximum feedback at a measuring point. Each step can be skipped by using the (< >) keys. Progress is displayed at the bottom in a series of 6 bars. Blue means in progress, green means completed.

Other features of the SmartEAR-GO! app

Read:

Device information, measurement profile, battery level, device ID, firmware and firmware update

Programming:

For instance, changes to the measurement times, upload times or noise recording length

Audio read out:

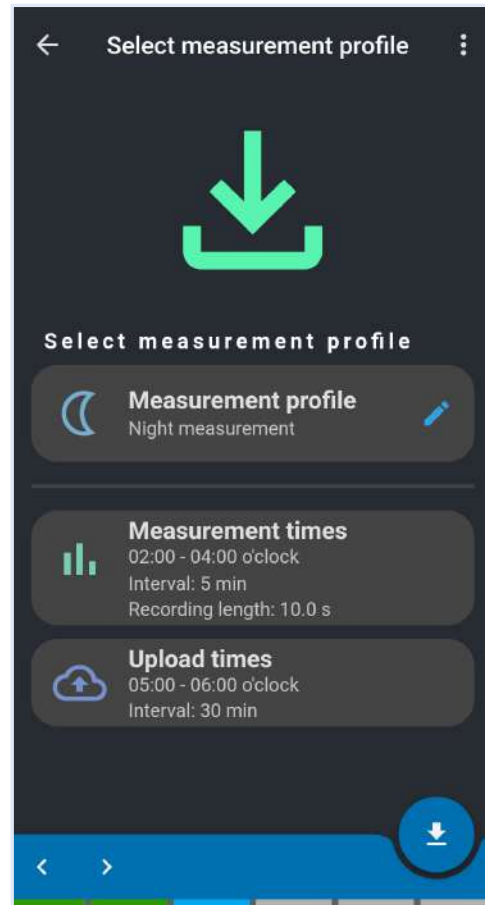
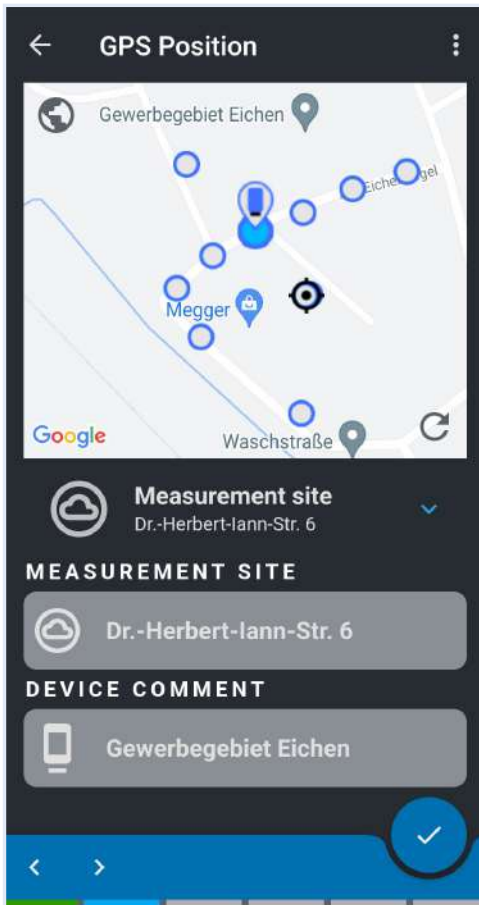
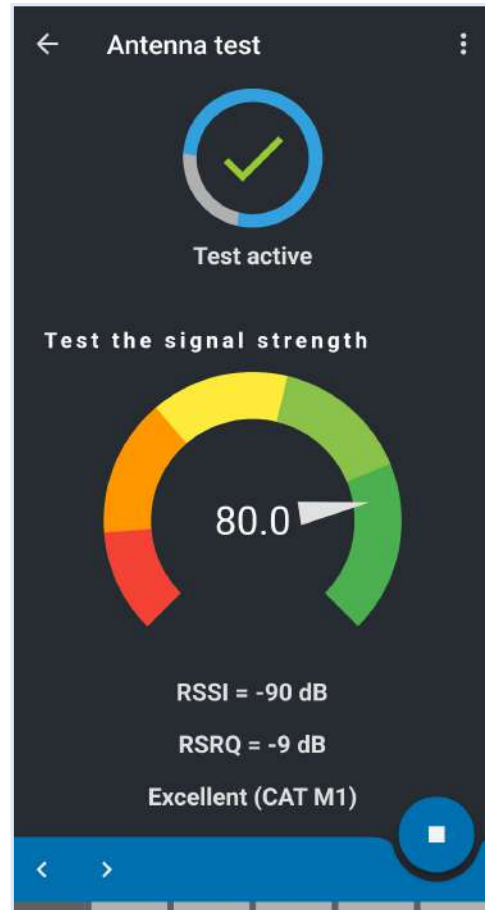
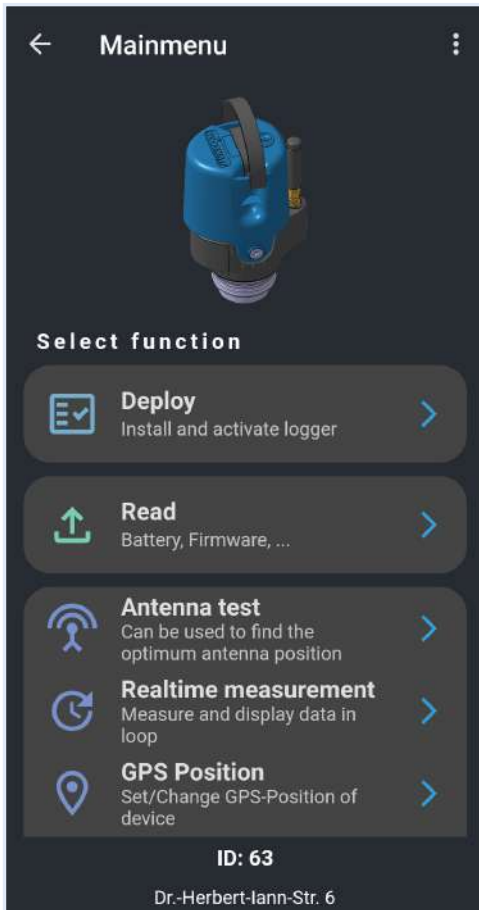
Reading out sound recordings per BT, playing them back over smartphone as well as uploading them to Poseydon over smartphone (uses mobile network, e.g. 4G)

Service:

Initiate a measurement data upload on the SmartEAR unit (uses NB-IoT or LTE-M), server information, save log files and share them with Seba Tech support, reset your SmartEAR unit to the factory settings

Poseydon Software (pages 42-45):

Open your own Poseydon account on your smartphone





Sebalog N-3

Technische Daten	
Dimensionen	115 x 45 mm Ø
Gewicht	400g
Stromversorgung	Interne Batterie
Betriebsdauer	5 Jahre unter Standardbedingungen
Schutzklasse	IP 68
Betriebstemperatur	- 20 °C ... + 60 °C
Messwertspeicher	100 Tage
Funkreichweite	80m, abhängig von örtlichen Bedingungen
Schnittstelle	Bidirektionaler Funk

Sealog N-3 Noise Logger

With its proven features such as Lift & Shift or patrol, the Sealog N-3 has become an indispensable part of everyday life.

The N-3 measures a leak's noise level (dB) and frequencies (Hz) simultaneously. While the level alone only documents the general presence of a leak, in combination with the frequency it also provides the approximate distance in relation to other loggers. In addition, audio files are stored. For years, SebaKMT has been adhering to the 'easyGO' philosophy, which permits all devices to be operated, settings to be changed and data to be evaluated with minimum effort.

LIFT AND SHIFT:

The noise loggers are initially prepared for recording in the office in Lift & Shift mode. The settings can be adapted to the local conditions. The loggers are then distributed in the water network, where they remain for a certain period of time.

The loggers measure the noise level every night and store the results in the built-in data logger. The next day or a few days later, they are read out in the office or in the measuring van in order to proceed with the analysis.

Lift & Shift is often chosen when several areas need to be systematically monitored with a single logger set in a cyclical manner – for example, by service providers.

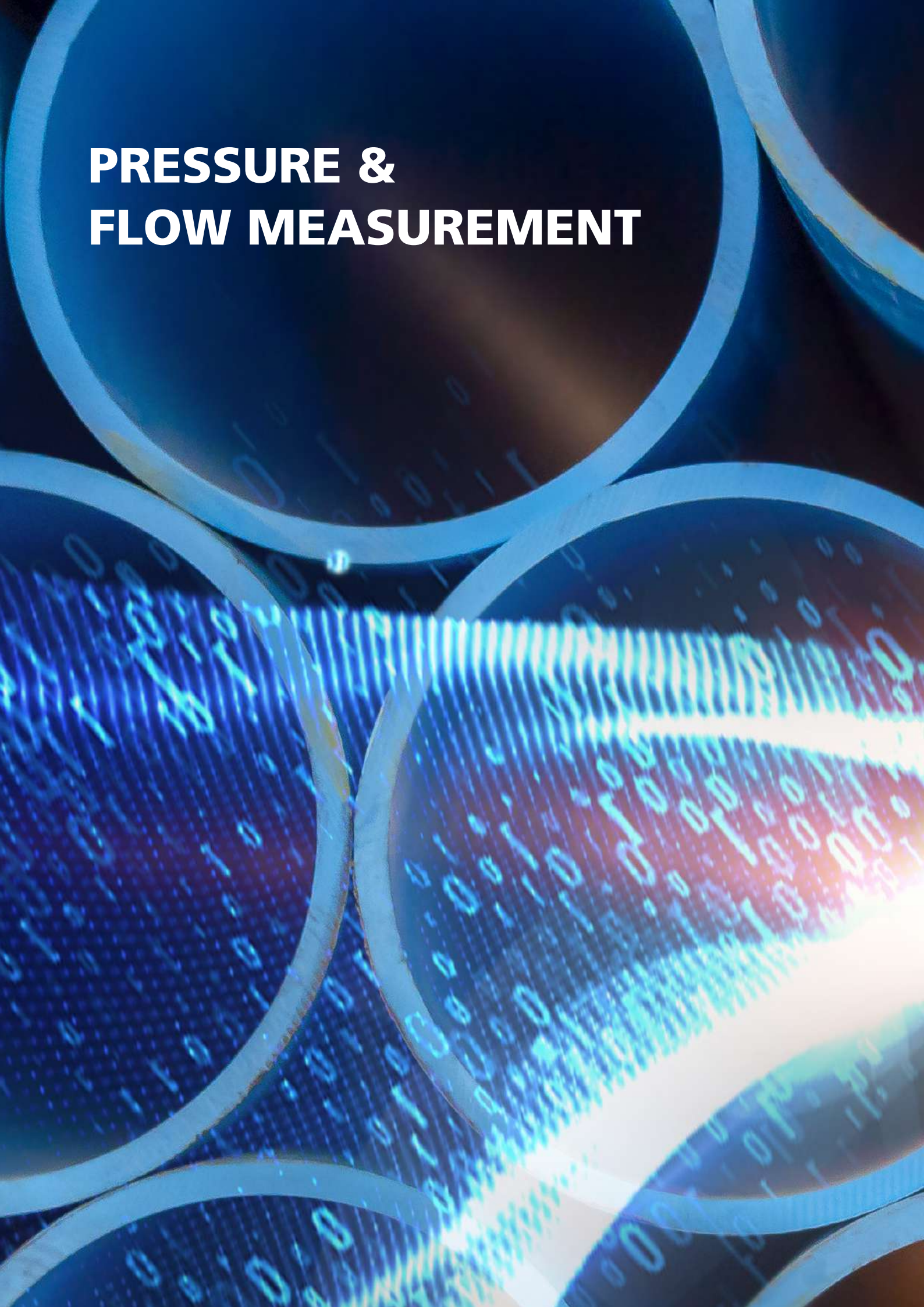
PATROL

In Patrol mode, the loggers remain permanently distributed in the water network. When required or at certain intervals, the noise loggers are taken out of service to read out the measurement data.

The Patrol method is selected when data is needed immediately owing to an event – such as an increase in minimum flow at night. For example, data from the previous nights can be used for more accurate differential analysis. This data would not be available in Lift & Shift mode.

Patrol mode is mainly used by utility companies that wish to react very quickly after an increase in leaks has taken place in order to keep the leakage time as short as possible.

PRESSURE & FLOW MEASUREMENT







Sebalog D-3

Pressure and flow rate data logger with GPRS

- Easy to install and extensive remote configuration
- Compact and robust design for maximum reliability
- Convenient alerting on your smartphone
- Data logger for over 1 million measurements

Technical Data	
Dimensions	185 mm x 115 mm
Weight	900 g
Power supply	Internal battery External battery (opt.) External permanent (opt.)
Operating time	5 years under standard conditions
Protection class	IP 68
Operating temperature	-20 °C ... +60 °C
Data logger	Up to 1,7 Mio. measurements
Data transmission	868 MHz wireless 3G/2G



Real-time measurement

With the help of the real-time measurement and StepTest functions you are able to perform measurements with the D-3 and observe them live on a computer.

The Most Universal Data Logger Around

Its compact and robust design with fully waterproof housing makes the Sebalog D-3 data logger tough. It reliably informs you about the pressure and flow rate status in your supply network on up to four channels.

Data updated daily is sent to your control centre per 3G or 2G mobile communications, or can be received, processed and displayed in the SebaCloud or the new POSEYEDON cloud platform.

Always up to date with the online measurement and alarm function

Enormous emphasis has been placed on user-friendliness with the Sebalog D-3. Online measurements are supported on all channels giving as you the user the option to conveniently access logged measurement data and daily updated measurements from your smartphone at anytime.

Feel secure!

The Sebalog D-3 alarm function informs you immediately if significant changes are detected in the pressure level or flow rate, because the latest measurement data from the Sebalog D-3 is readily available online after an alarm.

You have a reliable view of your data – no matter where you are – so that you can pinpoint the exact location of the noise source.



We will be happy to configure the Sebalog D-3 to suit your specific application. Choose from a variety of options, such as 2 or 4 measuring channels, with or without GSM modem for permanent data transfer or with integrated 16 bar, 25 bar or even 35 bar pressure sensor. Do you need two integrated pressure sensors? No problem. Ask us today and we'll organise it for you!

868 MHz transmission frequency	
Item Description	Item Number
2 measuring channels	
Sebalog D-3 with 2 channels	1003786
Sebalog D-3 with 2 channels, pressure: 16 bar	1003790
Sebalog D-3 with 2 channels, pressure: 25 bar	1003794
Sebalog D-3 with 2 channels, pressure: 35 bar	1003798
Sebalog D-3 with 2 channels plus GSM module	1003770
Sebalog D-3 with 2 channels, pressure: 16 bar plus GSM module	1003774
Sebalog D-3 with 2 channels, pressure: 25 bar plus GSM module	1003778
Sebalog D-3 with 2 channels, pressure: 35 bar plus GSM module	1003782

Item Description	Item Number
4 Messkanäle	
Sebalog D-3 mit 4 channels	1003788
Sebalog D-3 mit 4 channels, pressure: 16 bar	1003792
Sebalog D-3 mit 4 channels, pressure: 25 bar	1003796
Sebalog D-3 mit 4 channels, pressure: 35 bar	1003800
Sebalog D-3 with 4 channels plus GSM-Modul	1003772
Sebalog D-3 with 4 channels, pressure: 16 bar plus GSM module	1003776
Sebalog D-3 with 4 channels, pressure: 25 bar plus GSM module	1003780
Sebalog D-3 with 4 channels, pressure: 35 bar plus GSM module	1003784
Sebalog D-3 with 4 channels, pressure: 2x 25 bar plus GSM module	1007432



Sebalog P-3-1 / P-3-Mini

Pressure logger especially designed for potable water suppliers

- Pressure surge recording
- Virtually indestructible housing (IP 68 protection)
- Fits in every shaft
- Long service life over several years
- High-precision pressure sensor
- Low overall height
- Large data logger memory

Technical Data	P-3-1	P-3-Mini
Dimensions	110 x 96 mm Ø	120 x 63 mm Ø
Weight	Approx. 1 kg	Approx. 365 g
Protection class	IP 68	
Measuring range	0 ... 16 Bar (25 & 35 opt.)	
Operating temperature	-20 °C ... +60 °C	
Power supply	Interne Lithium-Batterie	
Operating time	> 5 years or 10.000.000 readings	
Data logger	> 1.500.000 readings	
Interface	868MHz radio	
Max. pressure sensor error	1%	
Log interval	1 s ... 24 hrs.	

Pressure Monitoring and Surge Recording Logger

Sebalog P-3 pressure loggers are ideal for monitoring the pressure in potable water supply networks. They are used to make short-term measurements, monitor pressure in permanent installations and detect pressure surges.

The P-3-1 pressure logger fits easily into any underground hydrant. Owing to its particularly small footprint, the P-3 Mini even fits into shafts with limited installation space.

Thanks to their extremely robust housing, P-3 pressure loggers are especially suited for continuous use in the field.

The Sebalog P-3 Mini can be read out wirelessly without opening a shaft cover or, in combination with the GSM transmitter, data can be downloaded remotely.

The options available for setting the Sebalog P-3 Mini are varied and diverse. Its extremely large logging capacity allows measurements to be made at short intervals, even over longer periods of time.



It goes without saying that our P-3 pressure logger data can also be used in the POSEYEDON cloud.

Sebalog P-3-1	
Item Description	Item Number
Single logger	128314460
Sebalog P-3-1-1	128310231
Sebalog P-3-1(1 pc), Log RI radio interface, hydrant key adapter, switching magnet, 2.5 m USB extension	
Sebalog P-3-1-3	1005685
Sebalog P-3-1 (3 pcs.), Log RI radio interface, hydrant key adapter, switching magnet, Sebalog P-3 transport box, 2.5 m USB extension	



Sebalog P-3-Mini	
Item Description	Item Number
Single logger	1004701
Sebalog P-3-Mini Set	1005736
Sebalog P-3-Mini (1 pc), Log RI radio interface, adapter for UF hydrant, LOG P-3 Mini, pressure hose, magnetic adapter	





Flow Meters

Portable and stationary pressure and flow meters

Portable	Stationary
UDM 300	SebaFlow
UDM 500	UDM 501

Portable ultrasonic measuring devices represent the ideal flow meter for long-term measurement campaigns in the field. Depending on the measurement interval programmed, operation can take place autonomously for several months. Setting up a flow measuring point is quick and involves no interruption to the operation. It then delivers accurate measurement results with the highest reproducibility and no measurement drift.



Thanks to excellent sensitivity to the lowest flow velocities (up to 0.01 m/s), these devices are ideally suited for monitoring drinking water networks by measuring minimum night-time flows.

All this makes the UDM series the ideal companion for the day-to-day work performed by water suppliers, hydrologists and engineering offices.



Stationary ultrasonic measuring devices are ideally suited for the metrological monitoring of potable water networks. Installation requires absolutely no intervention in the pipeline. This facilitates the simple and cost-efficient installation of additional flow measuring points in an existing potable water supply network.

In addition, the devices detect even the lowest flow velocities of up to 0.01 m/s with a high degree of accuracy. For drinking water suppliers, however, precise monitoring of minimum night flows is an essential part of their leakage detection measures.

There is no procedure for zero-point drift correction for our measuring instruments because they simply do not drift.

The devices are equipped with the most robust mounting devices available. Wide stainless steel straps ensure that the sensors are securely, permanently and stably mounted with additional protection due to a robust stainless steel cover.

All this ensures the long-term durability of our measuring system, which is suitable for installation both in the shaft and directly in the ground.



Watch our video to see an explanation of the technology and installation (2:40 min).

Simply scan the QR code with your smartphone.

SebaFlow Classic

Ultrasonic flow and pressure monitoring system

- Seamless data transmission
- Suitable for balancing
- Permanent power supply
- 100% remotely configurable



Cost-efficient installation without shaft construction



Fast installation without supply interruption



Control measurement data conveniently from your office

The SebaFlow facilitates the permanent flow and zone monitoring of a pipe network section (DMA, District Metering Area) using ultrasonic technology. Attaching the sensors to the outside wall of the pipe means that installation involves no interruption to the water supply. The SebaFlow is robust and also completely maintenance-free, allowing you to install it without the need for a shaft structure.

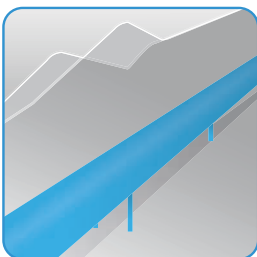
The SebaFlow works independently of the material. This means that all types of pipes can be measured or monitored. The existing infrastructure (e.g. street lighting) can be used for the power supply. The integrated rechargeable battery also guarantees uninterrupted operational readiness for several days.

The data collected is sent to the new SebaKMT Cloud POSEYEDON with the help of an LTE/GSM modem. An alarm function and limit value setting help to intervene quickly and efficiently in an emergency. The SebaFlow also supports remote monitoring and configuration by GSM, so that the SebaFlow – once installed – can be conveniently controlled and monitored from your control centre.

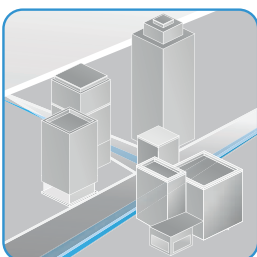
Addressed application fields – or who actually needs them?



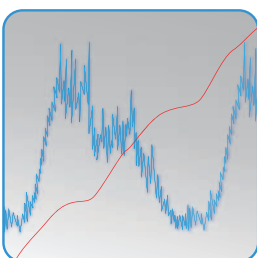
Pressure and flow-based leak detection on fire mains, e.g. on airport runways.



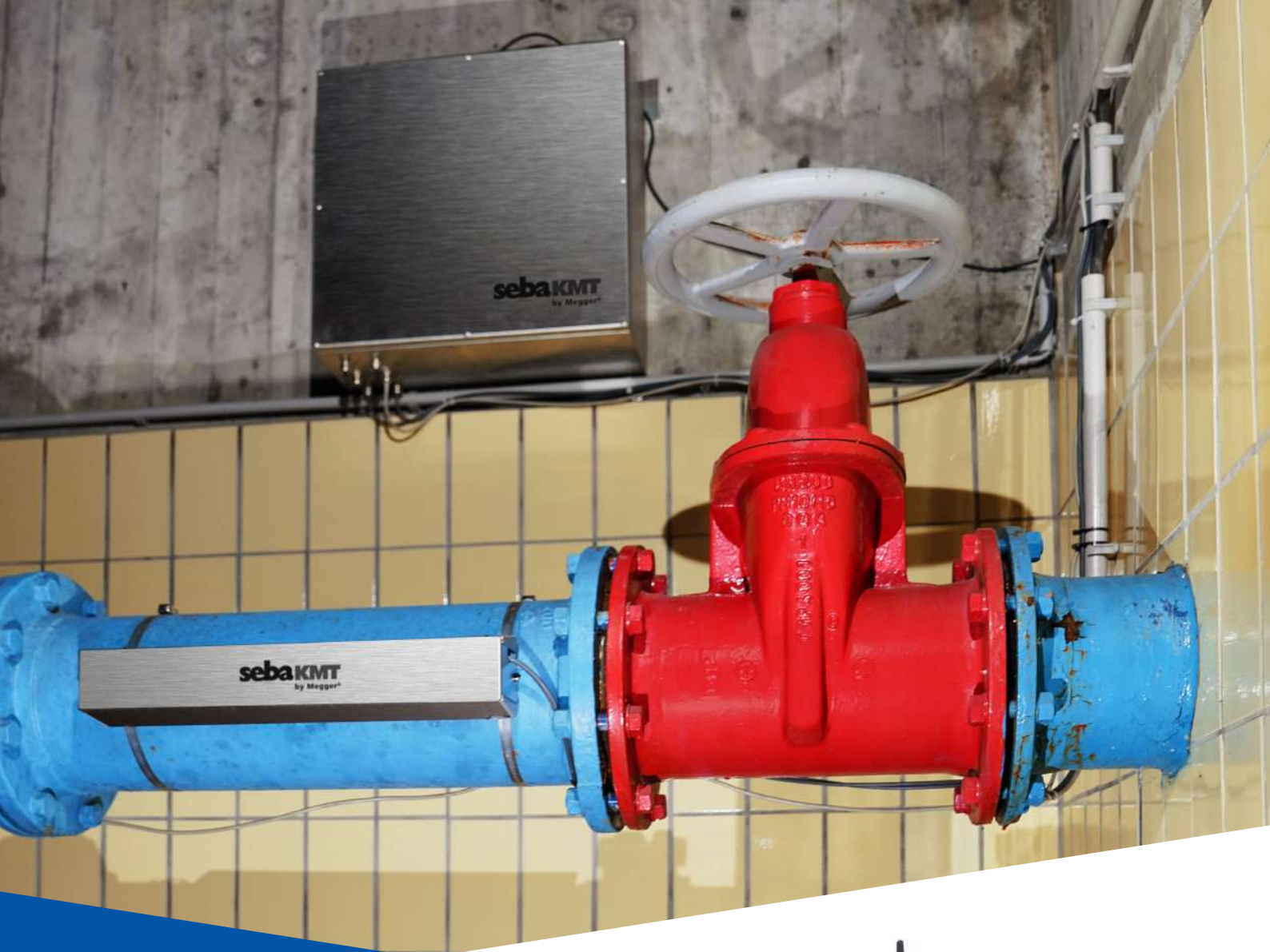
Leak detection on trunk mains, Pressure and flow monitoring. Sensors, such as quality measuring probes or monitoring technology possible as add-ons.



Pressure and flow measurements in inner-city potable water networks. It supplements permanently supplied SebaFlow CLASSIC systems by allowing measuring points without access to a permanent power supply to be used as well.



Periodic night-time minimum or consumption measurements for leak detection.



SebaFlow-BAT

The world's first battery-powered ultrasonic flow and pressure monitoring system

- No permanent power supply required
- Submersible IP 68 housing
- Battery life greater than/equal to 1 year
- Measuring point equipment can be flexibly customised



The IP 68 classified VA housing passes even the toughest drop and leak tests. With a depth of 1.2 m and for more than 68 hours, it can also withstand a longer flood.

The SebaFlow-BAT now expands and optimises the SebaKMT SebaFlow device series. As the first company to manufacturer comprehensive measuring systems to date, SebaKMT has had a completely self-sufficient, battery-operated ultrasonic flow measurement including data transfer in its range since the end of 2020. In line with the requirements of our customers in pipe network planning as well as balancing and billing, we defined the following requirements as being extremely important:

The problem with the power supply

Based on a measurement interval of 5 minutes (usually sufficient for balancing), the SebaFlow-BAT achieves a run time of at least 1 year with its built-in 100 Ah lead-crystal battery. With the appropriate application, where the most precise balancing is not the aim, the run time even extends to well over 1 year at 10-minute intervals.

In addition to 5 or 10 minute intervals, our SebaFlow-BAT systems can be freely parameterised, beginning with 1-60 minutes. If a pressure sensor is used in parallel, the pressure readings are transferred at the same interval as the flow measurement. In addition to 5 or 10 minute intervals, our SebaFlow-BAT systems can be freely parameterised, beginning with 1-60 minutes. If a pressure sensor is used in parallel, the pressure readings are transferred at the same interval as the flow measurement.

Performance of the two systems in comparison

SebaFlow		
Functions	SebaFlow Classic	SebaFlow-BAT
Self-sufficient battery operation*	⊘	✓
Flow measurement, ModBus interface**	⊘	✓
Flow measurement, current loop	✓	✓
Pressure monitoring (no pressure surges)	⊘	✓
Recording and transfer of pulse values	✓	⊘
CSV upload	✓	⊘
Remote configuration via POSEYEDON	✓	✓
LTE 4G data transfer***	⊘	✓
Battery low alarm	✓	✓
Flow limit alarm	✓	✓
Remote updates via POSEYEDON or locally	✓	✓
Creation of balance sheets in POSEYEDON	✓	✓
Flexible power supply (batt./perm.)	⊘	✓

*) 1 year battery life at 5 minute intervals**)Cannot be remotely configured! ***) NB IoT

Portable Flow Meters

UDM 300	
Item Description	Item Number
1-MHz Set 2	1006592
Recommended for 80...400 mm Ø UDM 300 transmitter, 1 MHz sensor pair, LEMO connection type, holder system, coupling paste, coupling foils, universal plug-in power supply, steel brush, 2 m measuring tape, carrying case	
2-MHz-Set	1006594
Recommended for 25...200 mm Ø UDM 300 transmitter, 2 MHz sensor pair, LEMO connection type, holder system, coupling paste, coupling foils, universal plug-in power supply, steel brush, 2 m measuring tape, carrying case	
0,5-MHz-Set	1006593
Recommended for 400...3100 mm Ø UDM 300 transmitter, 0.5 MHz sensor pair, LEMO connection type, holder system, coupling paste, coupling foils, universal plug-in power supply, steel brush, 2 m measuring tape, carrying case	
UDM 500	
1-MHz Set	1012795
Ultrasonic flow measuring device, clamping device, power supply and charger, transport case, 1 pc. tube of coupling paste, double sensor, analysis software	



Stationary Flow Meters

UDM 501

Item Description	Item Number
UDM 501 M 12 V DC	1004842
UDM 501 M 24V DC	1007828
UDM 501 M 230V AC	1007381

UDM 501 K 12V DC 2	1006500
UDM 501 K 24V DC	1009336
UDM 501 K 230V AC	1009335

SebaFlow

Item Description	Item Number
SebaFlow 1 MHz sensors (recommended for up to approx. DN400)	1005714
SebaFlow 500 kHz sensors (recommended from approx. DN400)	1006499
Sensor lead extension	1006993





CORRELATION





Correlators Series

Correlux hybrid correlator
for online and offline measurements

- Online and offline correlation
- Long operating time and inductive sensor charging
- Point detection using multi-sensors or ground microphone
- Perfect for synthetic and transport lines
- Multi-correlation without the need to enter pipe parameters



Very easy to use

Very easy to use with colour touch screen. The Correlux C-3 housing is also light and handy.

Technical Data	
Dimensions	90 x 185 x 60 mm
Weight	400 g
Power supply	3,6 V lithium battery
Operating time	> 10 hrs.
Operating temperature	-10 °C ... +50°C
Storage temperature	-25 °C ... +70°C
Display	LCD, value 0-99
Data logger	Last reading

Online and Offline Correlation

The Correlux C-3 is suitable for making measurements directly (online) and at night (offline). If the measuring point is easily accessible and not in a dangerous area, online measurement comes into play. This is where the power transmitters (transmitter and microphone) are exposed for use.

These transfer the live signal directly to the correlator, allowing you to receive the result immediately.

If the measuring point is in an area that is difficult to access or there is too much background noise, you have the option of carrying out an offline measurement with the power transmitters or with up to eight multi-sensors.

Correlux C-3			
Item Description	Standard	Pro	ProPlus
C-3 Korrelator	✓	✓	✓
2 power transmitters (A/B)	✓	✓	✓
Multisensors	✗	3 pcs.	8 pcs.
Headphones	✓	✓	✓
Case with built-in charging function	✓	✓	✓
Charger/car charger	✓	✓	✓
PC software	✓	✓	✓



Correlux C-30			
Item Description	Standard	Pro	ProPlus
LOG RI	✓	✓	✓
Multisensors	3 pcs.	5 pcs.	8 pcs.
Case with built-in charging function	✓	✓	✓
Charger/car charger	✓	✓	✓



* Tablet not included in delivery

Korrelatoren-Serie



Correlux C-3	
Item Description	Item Number
C-3 Standard Set	1006550
Correlator, COR power transmitter (2 pcs.), COR power transmitter, act. piezo sensor universal microphone (2 pcs.), case for COR C-3 (base), charger, 3.5 m car charger adapter, stereo headphones, extension rod for PAM T-2/U (2 pcs.), 2 m, 3 mm blue braided nylon cord (2 pcs.), Sebalog D connection cable (USB output), CorreluxView PC software	

C-3 Pro Set	1006551
Correlator, COR power transmitter (2 pcs.), act. piezo sensor universal microphone (2 pcs.) Correlux multisensor (3 pcs.), case, charger, car charger adapter, stereo headphones, extension rod for PAM T-2/U (2 pcs.), braided nylon cord (2 pcs.), magnetic angle adapter (2 pcs.), Sebalog D connection cable (USB output), CorreluxView PC software, label set, installation set	

C-3 ProPlus Set	1006552
Correlator, COR power transmitter (2 pcs.), act. piezo sensor universal microphone (2 pcs.), Correlux multisensor (8 pcs.), case for COR C-3 (base), case, charger (2 pcs.), 3.5 m car charger adapter (2 pcs.), stereo headphones, extension rod for PAM T-2/U (2 pcs.), tribrach adapter (8 pcs.), nylon braided core (8 pcs.), magnetic angle adapter (8 pcs.), Sebalog D connection cable (USB output), CorreluxView PC software, label set, installation set	

Correlux C-3 Standard Extension Set → Pro	1007804
3x charging station 3x MS-3 multisensors	

Correlux C-3 Standard Extension Set → ProPlus	1007807
Case incl. 8x MS-3 multisensors	

Correlux C-3 Pro Extension Set → ProPlus	1007810
Case incl. 5x MS-3 multisensors	

Optional	
Charger for CPK3/CMK3	1006646
3.5 m car charger adapter	810000006
Charging station for COR MS-3 (3 pcs.)	2005511

Multipoint Correlator



Correlux C-30	
Item Description	Item Number
C-30 Pro Set	1011113
Case, charger, radio interface (868MHz), Correlux multisensor (3 pieces), tribrach adapter (3 pieces), braided nylon cord (3 pieces), magnetic angle adapter (3 pieces), label set, installation	



Correlux C-30	
Item Description	Item Number
C-30 Standard Set	1011112
Case, charger, radio interface (868 MHz), Correlux multisensor (5 pcs.), tribrach adapter (5 pcs.), braided nylon cord (5 pcs.), magnetic angle adapter (5 pcs.), mounting set for COR MWA (5 pcs.), label set	



Correlux C-30	
Item Description	Item Number
C-30 ProPlus Set	1011114
Case, charger, radio interface (868 MHz), Correlux multisensor (8 pcs.), tribrach adapter (8 pcs.), braided nylon cord (8 pcs.), magnetic angle adapter (8 pcs.), label set, installation set (8 pcs.)	



PAM HYDRO-3 Set	
Item Description	Item Number
PAM HYDRO-3 Set	1007009
Piezo hydrophone (2 pcs.), adapter (2 pcs.), ventilation hose (2 pcs.), connection cable (2 pcs.), Storz coupl. size C female pipe thread G1 1.5" (2 pcs.), GEKA coupling (2 pcs.), transport case	



Acoustic Series

HL 50-BT portable leak detector

- Easy-to-use
- Frequency filter for various applications
- Constantly ready for use thanks to its rechargeable battery
- External ground microphones can be connected for professional leak detection
- With integrated sensor and Bluetooth® wireless headphones

Technical Data	HL 50-BT
Dimensions	90 x 185 x 60 mm
Weight	400 g
Power supply	3,6 lithium battery
Operating time	> 10 hrs.
Operating temperature	-10 °C ... +50°C
Storage temperature	-25 °C ... +70°C
Display	LCD, value 0-99
Data logger	Last reading



With Integrated Sensor and Bluetooth® Headphones

Thanks to its special ergonomic design, the HL 50-BT can be held in one hand during use. Only four function keys (selection, filter, mute, volume) – which you can easily reach with your thumb – are needed to operate the HL 50-BT.

The standard HL 50-BT version offers an integrated sensor and Bluetooth® wireless headphones. Annoying connection cables are a thing of the past. This makes the HL 50-BT ideal for listening to gate valves and hydrants, but also for listening to fittings in buildings.

The measured sound level is shown simultaneously on a large LCD display as a numerical and graphic bar. The filter range currently set is also displayed. When a measurement is completed, the last measured sound level is marked on the bar.

The HL 50-BT is optionally available with three different external microphones for maximum flexibility and professional applications.



HL 50-BT	
Item Description	Item Number
HL 50-BT Set	1009207
HL 50-BT, headphones, USB charger, probe tip, extension rod, magnet adapter, 20/42 mm slider adapter, EU-US Mains adapter, carrying case	



Acoustic Series

Hear and see leaks with the HL 7000

- Intuitive operation with clear colour touch screen
- Constantly ready for use thanks to its powerful lithium-ion batteries
- Integrated GPS receiver
- Environmental/noise reduction
- Frequency analysis
- Option: tracer gas sensor connection

Technical Data	HL 7000
Dimensions	200 x 80 x 650 mm
Weight (without sensor)	700 g
Power supply	3,6 V lithium battery
Operating time	> 10 hrs.
Operating temperature	-20 °C ... +60°C
Storage temperature	-25 °C ... +70°C



Convenient Applications

Thanks to its variable design and automatic 360° sensor pick-up, the HL 7000 ground noise system offers you a wide range of options for detecting leaks. And with its powerful lithium-ion batteries, working sessions lasting more than 10 hours present absolutely no problem.

The Bluetooth® enabled, wind-protected piezo ground microphone with integrated pre-amplification picks up very low leak frequencies on soft materials such as PVC or PE just as clearly as high frequencies on steel or cast iron pipes.

In its rugged charging and transport case, each piece of HL 7000 equipment finds its own dedicated place. Thanks to pre-installed charging cables, all chargeable components, such as the control unit, sensor rod and the Bluetooth® headphones can be charged together in the case.

When a pipe is damaged, the escaping water causes two types of noise which propagate along different paths. The Hydrolux HL 7000 makes these two sounds visible and audible for you. An intuitive control unit lies at the heart of these applications. With its high-resolution 4.3" colour touch screen, the device displays all the relevant menu items and measurement data in an easy-to-understand manner. Menu navigation is simple. Extremely lightweight (600 grams) and yet rugged, the control unit can be used in various ways: worn on your belt, firmly mounted on the sensor rod or simply attached to your trousers or belt with a clip. Wear the device as you want or as the situation requires. This allows for effortless working.



Work 100% wirelessly thanks to Bluetooth®

Integrated Bluetooth® technology makes annoying cables between the control unit, headphones and each of the sensors a thing of the past. Noise caused by wind and cable contact is no longer a problem either, allowing you to concentrate fully on the sound the leak is making.



Acoustic Series

Hydrolux	
Item Description	Item Number
HL 7000 Pro	1011016
HL 7000 receiver, Bluetooth headphones, carrying handle, PAM W-7, charger (int.), tripod adapter, PC connection cable, belt clip, carrying case, bracket and installation kit, multi-tool	




* Image includes optional accessories (PAM CORR-2, PAM H-7 & foot piece)

Hydrolux	
Item Description	Item Number
HL 700	1011529
HL 7000 receiver, Bluetooth headphones, PAM CORR-2, charger (int.), PC connection cable, belt clip, carrying case, multi-tool	



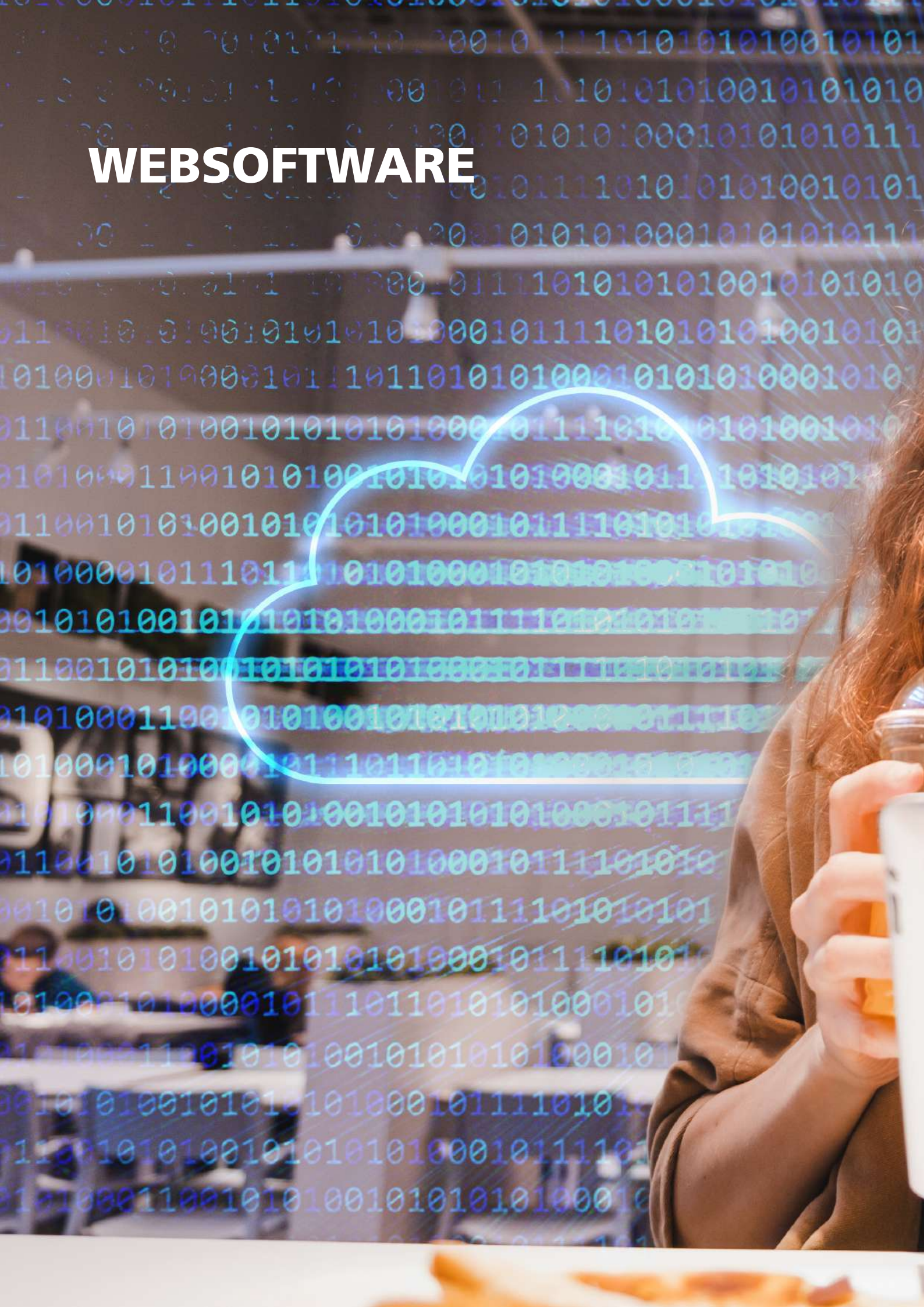


20-4h

Taxi und
Übernachtungsgäste
Barock-Hotel
und  frei



WEBSOFTWARE







POSEYEDON

Ihr Wassernetz immer im Blick



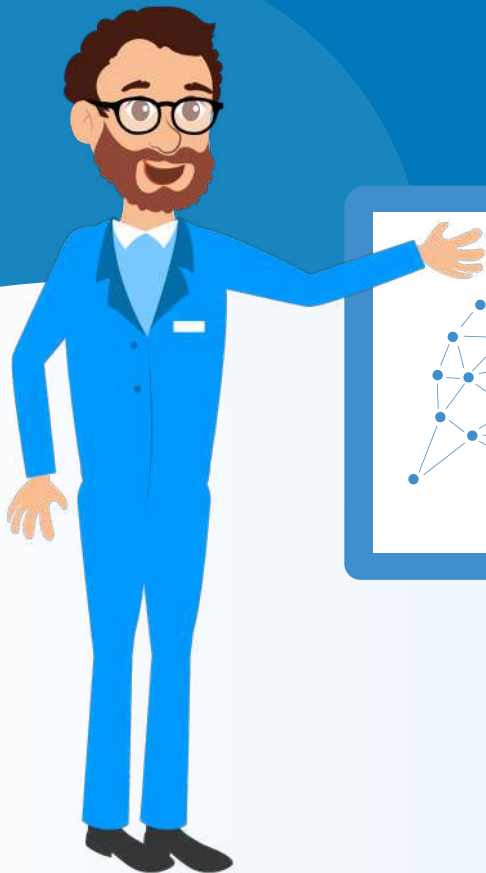
DURCHFLUSS



AKUSTIK &
FREQUENZ



DRUCK &
TEMPERATUR



Finally!

The cloud leak detection and monitoring solution that supports **all** your water management tasks.

Dashboard

→ Heatmap, leaks, evaluation

Network Manager

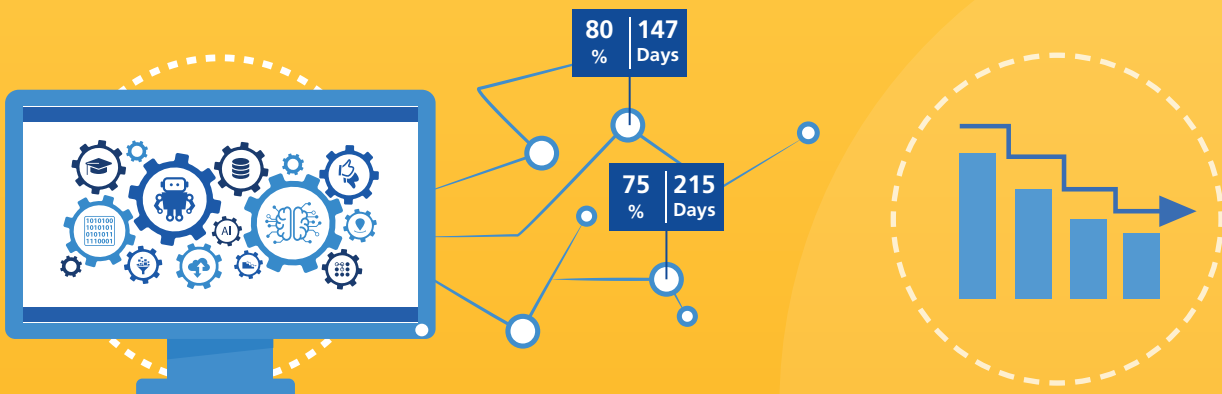
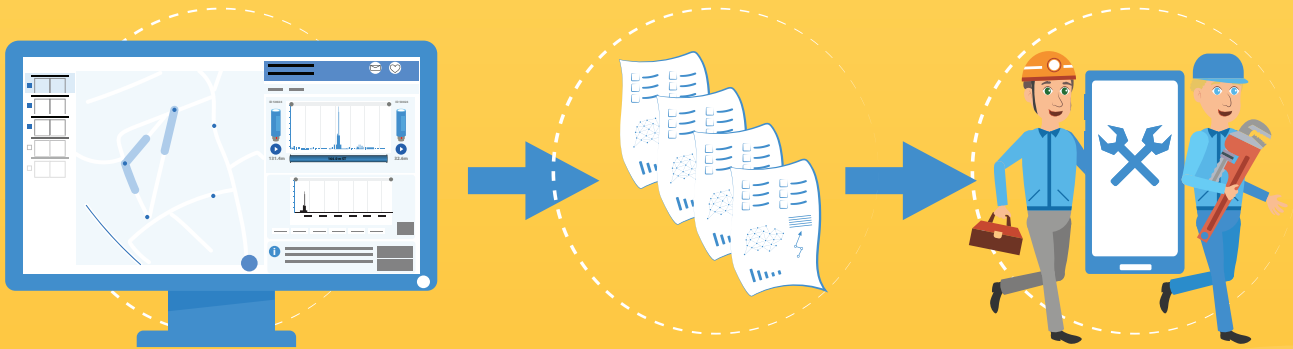
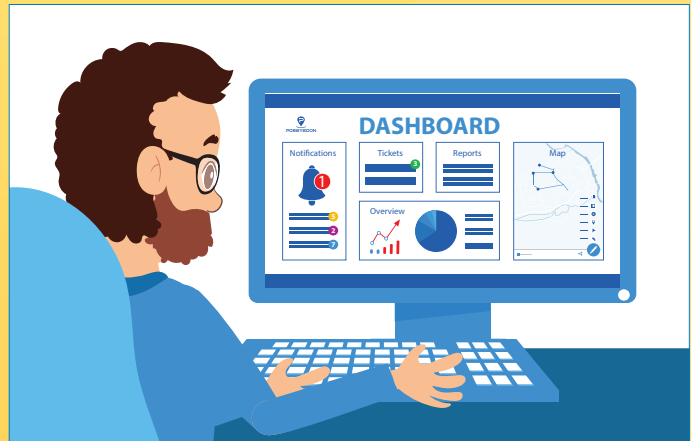
→ GIS system connection

Ticket System

→ Efficient service management

Reporting

→ Individually configurable reports



**POSEYEDON –
For less water loss!
www.poseyedon.de**

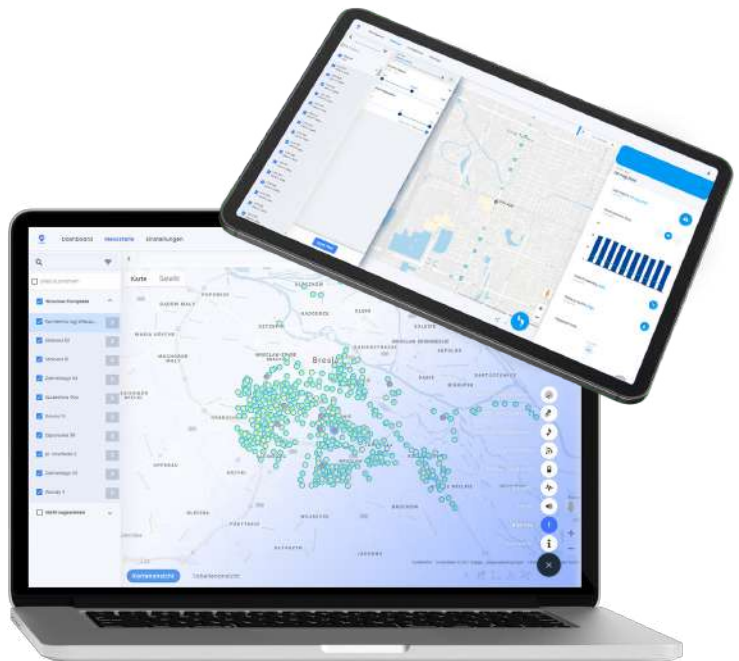




POSEYEDON

Online access to all your data – anytime and anywhere!

- All live data and evaluations under control anytime and anywhere
- Easily comprehensible and clear user interface
- Stable, fast, secure and energy-efficient data transfer
- Automatic online correlation
- Ongoing development (e.g. pattern recognition)



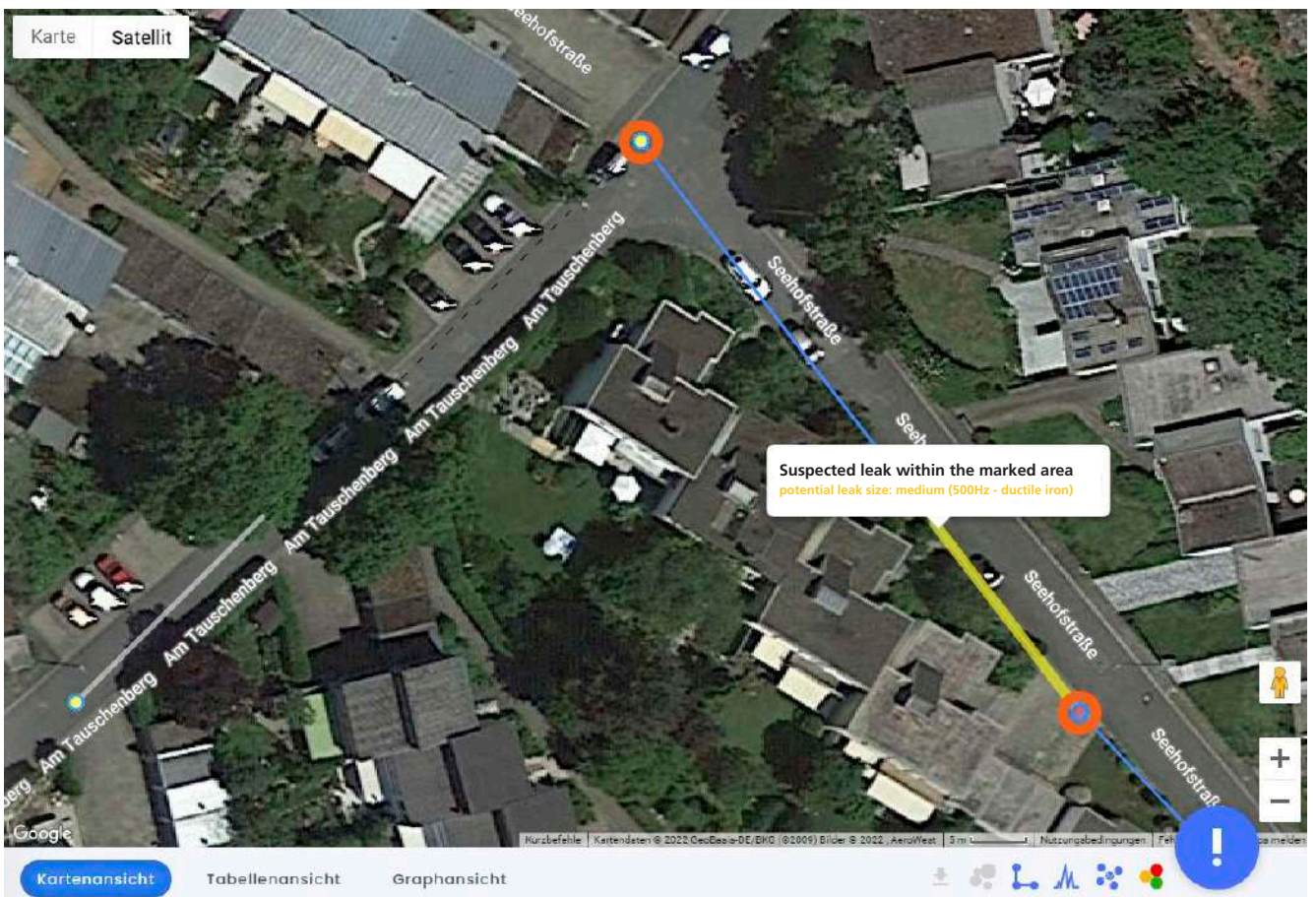
Leak Lines

Artificial intelligence using pattern recognition?

A new algorithm is now being introduced with the launch of the SmartEAR – our answer to the call for remote correlation.

Our Leak Lines algorithm has already calculated confirmed leaks, but still needs to learn more. Each additional SmartEAR installed helps us to improve the precision of leak localisation.

This algorithm is one of the features that is prioritised for POSEYEDON and it is scheduled to be rolled out sometime in 2023.



Request demo
access and test
it for free



LINE DETECTION







FERROLUX

Leitungsortung und Trassierung

- Cable compass for determining the cable position
- Excellent results even with cable accumulations
- Joint detection with minimum turbidity function
- Optional: sheath fault detection (RXNT)



Technical Data	HL 7000
Dimensions	200 x 80 x 650 mm
Weight (without sensor)	700 g
Power supply	3,6 V lithium battery
Operating time	> 10 hrs.
Operating temperature	-20 °C ... +60°C
Storage temperature	-25 °C ... +70°C

Ortet – einfach – alles!

The Ferrolux® RX audio frequency receiver combines numerous functions for the precision detection of cables and cable faults in one device with its SuperMax, SignalSelect (identification of the signal flow direction) and tried-and-tested audio frequency methods. This means that the precision receiver delivers clear results even in areas where cables are closely spaced.

Even long running operations are easy. Its extremely light weight combined with clear and intuitive display of the measurement results help.

In combination with audio frequency generators in the Ferrolux® FLG series, even branch joints and cable faults (e.g. vein closures) can be localised with pinpoint accuracy. Continuous display of the laying depth and signal current, coupled with supporting automatic functions (e.g. minimum turbidity function) make all this possible.

GPS coordinates can be integrated by means of a Bluetooth® interface. All measurement data can be displayed in graphic form both on the sunlight-compatible screen and on a PC.



Special

- Constant display of the laying depth and amperage
- Current direction detection and signal quality
- Frequency scan
- Special probe detection mode
- Programmable function keys
- Sensor weight only 900 grams
- Fast menu navigation with easyGO



Detection Technology

Multi-Frequency Line Detection System	
Item Description	Item Number
Feed-in adapter for live low-voltage lines up to 480 V	220-2832
Feed-in clamp, 125 mm (5")	220-2829
Feed-in clamp, 175 mm (7")	220-2830
Broadband pliers, 75 mm (3 inch)	222-2831
Fault probe (A-frame for sheath fault detection)	220-2834
Bag for A-frame	222-4857
Stethoscope sensor with flexible rod	220-2835
Sensor attachment for marker detection	220-2833
Double direct connection line	222-4863
12 V – mains operation adapter	222-3808
220-230-240 V voltage converter 12 V car socket	9003 5390

Ordering Information				
	Transmitter	Order No.	Receiver (matching the transmitter)	Carrying Case (for receiver and transmitter)
5 watts	CARLOC 5 W	102-1766	102-1765	222-4109
	CARLOC 5 W with Li-ion batteries	1013366		
	CARLOC PLUS 5 W	102-1767	102-1764	
	CARLOC PLUS 5 W with Li-ion batteries	1013367		
12 watts	CARLOC 12 W	102-1768	102-1765	
	CARLOC 12 W with Li-ion batteries	1013368	102-1764	
	CARLOC PLUS 12 W	102-1769		
	CARLOC PLUS 12 W with Li-ion batteries	1013369		



Detecting Cables and Pipelines

Item Description	Item Number
Easyloc Complete Standard System	890005616-S
Easyloc RX Standard receiver, Easyloc TX transmitter, earthing set, earth spike, carrying case, instruction manual	
Easyloc Plus-System	890016223-S
Easyloc RX Plus receiver, Easyloc TX Plus transmitter, earthing kit, carrying case, operating instructions	
Easyloc RX Basic	890010235
Receiver set with instruction manual	
Easyloc RX Standard	890003779
Receiver set with instruction manual	
Easyloc RX Plus	890016176
Receiver set with instruction manual	
Easyloc TX Basic / Standard Senderset	890005585
With earthing set, ground spike & instruction manual	
Easyloc TX Plus Senderset	890016199
With earthing set, ground spike & instruction manual	
Easyloc RX Cam	890010257
Receiver with instruction manual	



Probe and route location

Item Description	Item Number
GOK 30-R-45	820006495
Probe and route location cable, 30 m, 4,5 mm Ø, 3,7 kg	
GOK 50-R-45	820005036
Probe and route location cable, 50 m, 4,5 mm Ø, 4,0 kg	
GOK 60-R-45	820008319
Probe and route location cable, 45 m, 4,5 mm Ø, 4,5 kg	
GOK 100-R-45	820006575
Probe and route location cable, 100 m, 4,5 mm Ø, 5,35 kg	



Acoustic Detection of Non-Metallic Pipes

Item Description	Item Number
RSP 3 pipe knocker	813360
Control unit with battery, carrying strap, pulse generator, charger and tool case	



WATER MEASUREMENT VAN







SebaKMT Water Measurement Van

Always operational, everywhere

- Data can be analysed on site
- All devices are safely stored and ready at hand
- Devices can be charged on the go
- Separate comfortable office section
- Equipment compartment with high-quality aluminium shelves for equipment
- All pipe network data can be retrieved at any time, whether in the office or on the go

Optional

- Built-in water circuit
Also with booster pump as an option
- Additional power supply for equipment and the entire office section

General Specifications

The SebaKMT water measurement van has three separate sections: the driver's cab, office section (central section) and equipment compartment (rear section). A partition separates the office section from the driver's cab and the equipment compartment. The office section, equipped with an L-shaped desk and a swivel chair anchored to the floor, is characterised by the comfort of a conventional office and optimal working conditions for working on the go. Thermally insulating walls and ceilings provided for an improved working environment. The floor covering is particularly rugged and extremely durable. The built-in aluminium shelves offer space for everything you need on the go.



Ask for a quotation for your water measurement van today.

**By phone: +49(0)9544 - 680 or
by email to: sales@sebakmt.com**

Leak Detection in the 21st Century

Optimising work efficiency

All equipment, devices and instruments are properly and well stowed away in the measurement van and are therefore always ready for use when you need them. The instruments are well protected during transport in their designated place and the risk of losing small accessories is minimised.

On site data analysis

A decisive advantage of the water measurement van is the possibility to analyse data directly on site. The air-conditioned office section in the van offers all the conveniences of a mobile office and has enough space to comfortably study the pipe plans, evaluate the measurement data and plan the next work steps. Reflective elements and rotating beacons also provide a safe environment for data analysis, especially during the night or on busy roads.

Equipment compartment

The entire equipment compartment is made of washable and durable material. High-quality aluminium shelves provide ample space for all the leak detection equipment. Mains sockets allow the instruments to be charged directly in the equipment compartment.



Optional Equipment Options

Built-in water circuit

The water measurement van is equipped with a built-in water circuit with a flow and pressure measurement device. The water from the mains can be fed through this circuit. This allows both pressure and flow to be measured on site. All the pressure and flow data measured is recorded in a data logger that can be read out from the mobile office by means of wireless communication.

Built-in water circuit with booster pump

Detecting leaks in low-pressure areas of the water network is difficult. This problem can be solved by using a water circuit with a built-in booster pump that can briefly raise the pressure in the network. This makes leakage noises louder and makes correlators and ground microphones, for example, easier to detect.

Power management system

Our power management system is highly recommended for built-in water circuits. It makes sure that prolonged pressure and flow measurements can be conducted on site without any power supply problems. The system's batteries are charged automatically while the van is in motion and can power all leak detection equipment, the equipment in the office section as well as the lights in the van.

Power Generator

If the built-in water circuit is equipped with a booster pump, an underfloor generator is required for the power supply. For vans with no booster pump, a conventional built-in generator is adequate.

SmartEAR	
Item Description	Item Number
Full transport box, SmartEAR	2014649
Complete safety wire rope, SmartEAR	2015049
Magnetic mounting ring set, SmartEAR	2015069
32/14 220N magnetic adapter, neodymium magnet	820015167
LTE NB-IoT SMA-M 698-960 MHz rod antenna	90035958
SMA 0.5 m antenna extension	2015410
SMA 1.0 m antenna extension	2015409
LOG GT-3-1-AV, 3 m antenna extension	2011249
3.6 V/LSH-20 size D SAFT lithium cell	820007318

N-3 Noise Level Logger	
Item Description	Item Number
N-3 single logger	820019682
N-3-TNC single logger	820025700

N-3 logger sets	
15x N-3 loggers incl. 5x angle adapter incl. transport box	118304295

N-3-TNC logger sets	
15x N-3 loggers incl. 5x angle adapter incl. transport box	118304319

LOG N-3	
Neodymium magnet for external logger antenna (LOG EA 58)	820015167
Antenna with magnetic base	122010060
Angle adapter with embedded magnet	118303355
Upper foam insert for LOG N3	820026183
Transportbox Sebalog N-3 aus Schaumstoff	128315009

Commander 3-1 Complete Set	
Commander 868MHz, carrying case, headphones (wired), car charging cable, antenna with magnetic base, charger, PC connection cable, GPS module	118302239

Commander-3-1	
GPS module	118303791
Antenna extension	820005315
868 MHz TNC antenna connection	122010014
20 mm slider adapter	810000357
42 mm slider adapter	810000358
Coiled spring	820000929
Angle adapter with embedded magnet	118303355
Tube adapter for non-magnetic tubes (20-25 mm)	820001658
Nylon braided cord	304035025

Pressure and Flow Meters	
Item Description	Item Number
Sebalog D-3	
VK 75, connection cable for sensors (socket IN)	820012449
VK 76, Sebalog D connection cable	820012450
VK 78, extension cable (3 m)	118308294
VK 78, extension cable (5 m)	90027986
VK 78, extension cable (10 m)	90027987
VK 78, extension cable (15 m)	90027988
VK 84, Sebalog D-UDM 300 connection cable	820018168
VK 86, connection box	820019262
VK 88, Sebalog D-LOG D-EB connection cable	820020384
LOG RI, radio interface	820025783
LOG RI, long-range radio interface	1003877
LOG D-EB, external battery	820020355
LG LOG D-EB, charger	820021240
LOG D-3 GSM antenna	820020888
GSM antenna, step test	820020888
Hydraulic hose line (2 m)	118304220
Sebalog P-3 / P-3-Mini	
LOG TB-290, N-3 transport box	118306257
Foam insert for TB-240 Sebalog P-3	118307631
Adapter for UF hydrant, LOG P-3 Mini	2007329
Adapter (VA) for UF hydrant, LOG P-3 Mini	2010272
Hydrant wrench adapter	108301741
Switching magnet	820015167
Storz coupling size B, 2" thread, PN 16	820026998
GEKA coupling 1.5" thread (external)	650010117
Reducing sleeve from 2" internal thread to 1.5", aluminium	820026184
DN80 Rd 85x1/6" IT alu claw nut	820026168
2.5 m USB extension	820004240
Hydraulic hose, max. 35 bar, 0.54 m (NW 5 quick coupling, sleeve to spout)	128310977
Hydraulic hose, max. 35 bar, 2 m (NW 5 quick coupling, sleeve to 1/4" external thread)	118304220

ACCESSORIES

Flow Measurement	
Item Description	Item Number
UDM 300	
Transmitter L (Lemo connector)	1009281
1 MHz L sensor (Lemo connector)	1008790
2 MHz L sensor (Lemo connector)	1008791
0.5 MHz L sensor (Lemo connector)	1008792
0.2 MHz sensor (UDM 500)	1012431
1 m ball chain	1008793
2 m ball chain	1008795
External battery	1008637
Transmitter (TrimTrio connector)	1006572
2 MHz sensor (TrimTrio connector)	1006573
1 MHz sensor (TrimTrio connector)	1006574
0.5 MHz sensor (TrimTrio connector)	1006575
Readout cable	1006576
100 ml coupling paste (-30° C...200° C)	1007238
Sebalog D connection cable	820018168
Set of 5 m textile straps	1007480
Type VT-K set of permanent coupling foils (for K sensors)	1007396
Type VT-M set of permanent coupling foils (for M sensors)	1007397
Ultrasonic wall thickness gauge	118304435
Sensor mounting rail, 2 pcs. – for 1 & 2 MHz sensors	1006399
Sensor mounting rail, 2 pcs. – for 500 kHz sensors	1010527
UDM 500	
0.2 MHz sensor	1012431
0.5 MHz sensor	1012796
4 MHz sensor	810003528
Service adapter (terminal block + base)	1012797
Textile straps (5 mm x 25 mm)	1007480
Textile straps (7 mm x 25 mm)	1007481
VCM, sensor mounting rail (for 2x 1 & 2 MHz sensors)	1006399
VCK, sensor mounting rail (for 2x 500 kHz sensors)	1010527
UDM 501/SebaFlow	
GSM booster antenna, 5 m cable	90028107
SMA-ODU antenna adapter cable, 0.8 m cable	2010316
Antenna extension cable, 3 m	118308294
Antenna extension cable, 5 m	90027986
Antenna extension cable, 10 m	90027987
Antenna extension cable, 15 m	90027988

ACCESSORIES

Correlation	
Item Description	Item Number
C-3	
VK 98, PAM CORR (2.5 m)	108301284
VK 100, C-3-W2 connection cable	118302742
LOG GPS, C-3/CDR-3 GPS module	118303791
Correlux multisensor	1004815
AD-S-20, slider adapter, 20 mm	810000357
AD-S-42, slider adapter, 42 mm	810000358
TX A/B high temperature sensor -130° C (2 pcs. required)	1007108
Tribrach adapter for Sebalog Corr	128309877
Blue 3 mm nylon braided cord, (2 m)	304035025
Magnetic angle adapter	2007392
COR C-3 (1-8) label set	2007321
Mounting set for COR MWA	2007393
Charger for CPK 3/CMK 3	1006646
3.5 m car charger adapter	810000006
Charging station for COR MS-3	2005511

PAM HYDRO-3 Set	1007009
PAM HYDRO-3, piezo hydrophone, UF hydrant adapter, ES HYDRO-2, ventilation hose, VK 114, connection cable, Storz coupling size C female pipe thread, G1 1.5" GEKA coupling with internal thread G1 1.5", carrying case	

Acoustic Series	
Item Description	Item Number
HL 7000	
PAM T-7, piezo sensor probe microphone	1010396
VST T-7 extension rod	90029964
PAM T-7/PAM T-3, foot piece	820018811
PAM H-7, trace gas sensor	1010671
PAM CORR-2 (2.5 m), universal microphone	820019615
PAM CORR-2 (1.5 m), universal microphone	1012410
HL 50-BT	
PAM B-2 Set PAM B-2 (probe tip) 1.5 m tribrach adapter	1009209
PAM B-2-3 Set PAM B-2 (probe tip), 3 m	820015303

International Sales

NORTH EUROPE (DK, FI, NO, SE)

SASCHA KUFLIK
Business Unit Director Water

Mobile: +49 160 715 69 40
kuflik.s@sebakmt.com

SOUTH EUROPE

PASCAL GRUNER
Sales Director Water Division

Mobile: +49 175 936 15 54
gruner.p@sebakmt.com

AFRICA / MIDDLE EAST / SOUTHEAST ASIA

PASCAL GRUNER
Sales Director Water Division

Mobile: +49 175 936 15 54
gruner.p@sebakmt.com

SOUTH AMERICA

DIEGO ESCUTIA
International Sales Manager Water Division

Mobile: +49 175 587 34 87
escutia.d@sebakmt.com

GERMANY

SebaKMT
Megger Germany GmbH · Dr.-Herbert-Iann-Str. 6 · D-96148 Baunach
Phone. +49 9544 - 680 · Fax. +49 9544 - 2273
sales@sebakmt.com
www.sebakmt.com

sebaKMT
by Megger®

Subject to technical changes without notice. [WATER-CATALOGUE_EN_V03.pdf](#)

'SebaKMT' is a registered trademark. Copyright © 2023