# **SmartEAR**

The smart IoT noise logger for permanent monitoring and leak detection





# SmartEAR – the new generation noise and frequency logger

Efficiency and premium quality are crucial for drinking water supply. Modern measuring and detection technologies offer powerful tools to efficiently detect leaks in drinking water networks and thus ensure constant water supply through permanent online monitoring.

SebaKMT launches a completely revised noise and frequency logger concept to the market this year. For this purpose, SebaKMT product management investigated about the most important market requirements worldwide, such as overall performance, battery life, maintenance, easy handling, quick installation even for large quantities, attractive acquisition costs, and combined these with the newest technical solutions.

The result is the SmartEAR IoT noise/frequency logger. Robust and durable housing materials paired with a powerful lithium-ion battery enable a runtime of up to 9 years. Installation can be reliably carried out in a few automated steps within the shortest possible time, using the dedicated developed smartphone app SmartEAR-GO!. Once in operation, the SmartEAR loggers use the intelligent POSEYEDON cloud algorithms to detect, determine and localise leaks in the drinking water network.

Convince yourself about the new IoT noise logger generation SmartEAR from SebaKMT!





Customers will be able to drastically reduce leakage rates, minimise water losses, reduce energy and operating costs and quickly amortise initial costs.



## **LATEST RADIO TECHNOLOGY**

The combined CAT-M and NB-IoT modem transmits the measurement data safely and reliably out of deep shafts, boundary boxes or through closed lids.

## **QUICK & SIMPLE INSTALLATION**

Install quickly and easily with the SmartEAR GO! app and be sure that everything works through direct feedback and network strength test function.

## STATE-OF-THE-ART CLOUD PLATFORM

Smart algorithms make it possible to identify and localise leak positions.

# SmartEAR – all special features at a glance



360° magnetic ring (optional accessory) for flexible positioning

POSEYEDON's smart algorithms for identification and localisation

Network strength test function in SmartEAR-GO! app integrated

Movement notification by internal motion sensor



Pre-installed, exchangeable Nano SIM card ex works No additional efforts or SIM costs required

Size-optimised, robust and durable

IP 68 classification (even after battery change)

Anti-theft protection through magnet holding ring and stainless steel cable



Revised 32-bit measurement data analysis intelligence

Multiple measurement cycles within 24 hours

Recording audio files with 10 seconds length

Create preset or personalised measurement profiles in POSEYEDON



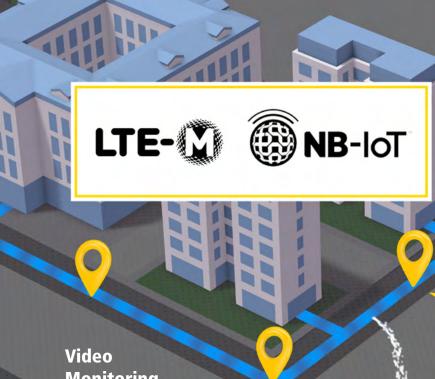
Unrivalled worldwide:

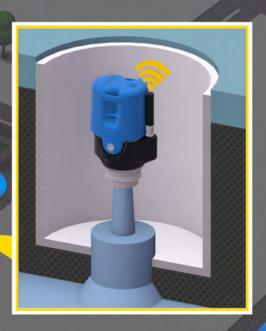
runtime up to 9 years appliying energy-optimised measuring mode

At least 5 years runtime by using permanent measurement default profile

Checking the battery status via SmartEAR-GO! app or POSEYEDON

Quick and easy battery replacement on site





Monitoring



LTE-M /

**NB-IoT** 

# POSEYEDON cloud platform



LTE (mobile network)



**SmartEAR** logger network **Data transmission** 





SmartEAR-GO! installation app





# **SmartEAR-GO!** installation app

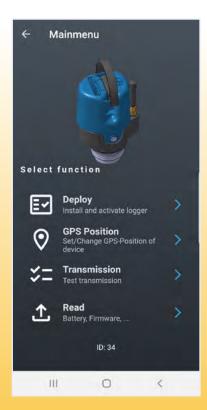
In just a few steps, guided by the app, you can install any SmartEAR in a very short time. All you need is the SmartEAR logger, a smartphone or tablet and the SmartEAR-GO! app optimised for Android and IOS.

The app can be downloaded free of charge and, in addition to the installation routine, offers other helpful and clever functions, such as real-time measurement on site, manual upload of audio files and an integrated network strength test function.

Customised settings, like SmartEAR logger measurement or upload times are possible with the SmartEAR-GO! app. During installation, assigne the SmartEAR logger either to an existing measuring point or quickly create a new one.

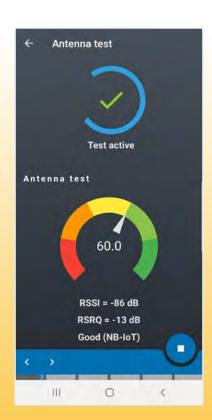
Get excited about our new combination of SmartEAR logger, SmartEAR-GO! app and POSEYEDON!





## **FUNCTIONAL VARIETY**

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



#### **RECEPTION TEST**

Direct feedback about available network coverage and signal reception strength



## **MEASURING PROFILES**

Use default measurement profiles, adapt them or configure your own in POSEYEDON

# **Optional accessories**

#### 360° MAGNET HOLDING RING

Infinitely adjustable for maximum flexibility. No more problems to fix the logger individually inside the shaft. The magnet adapter itself is included as standard with every SmartEAR logger.

#### **ANTI-THEFT STAINLESS STEEL CABLE**

Secure your SmartEAR logger with the securing set, consisting of a magnet holding ring and matching steel cable. Fix the logger directly to the fitting, the pipe or screw it to the shaft wall.







#### **TRANSPORT BOX**

Space for 10 SmartEAR loggers and with additional extra compartment for antenna extensions, magnet holding rings or anti-theft sets.

#### **ANTENNA EXTENSION**

The rod antenna, like the magnet adapter, is included as standard with every SmartEAR logger. If deep shafts are given, use the antenna extension (300 cm).









# **THREAD ADAPTER**

For direct connection to most hydrants or fitting housings, a thread adapter can be used as well.

Please contact us for individual sizes and combinations!







#### SebaKMT

Megger Germany GmbH  $\cdot$  Dr.-Herbert-lann-Str.  $6 \cdot$  D-96148 Baunach Tel. +49 9544 - 680  $\cdot$  Fax +49 9544 - 2273 sales@sebakmt.com

#### www.sebakmt.com

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