

ORTOMAT-CLASSIC

Mobile and permanent leak detection – Analysis of water losses



ORTOMAT CLASSIC

Simple, flexible and cost-effective solution

ORTOMAT CLASSIC is an investment in making savings in two ways

Detecting leaks can save on repair costs

Early detection and rapid localisation can prevent water damage, which can, at worst, cost more than an entire ORTOMAT system.

Detecting leaks can save water

Small concealed leaks lead to astonishingly high water losses. At a water pressure of 3 bar, a leak with a diameter of 8 mm leads to an annual loss of 24,870 m³, at 10 bar this loss

is 52,580 m³.

The ORTOMAT CLASSIC leak monitoring system offers the option of detecting water leaks early through mobile (regular position change) or permanent installations. Water pipes operated under pressure can be checked or monitored for leaks quickly and efficiently.

With this proven and tried-and-tested system, the user obtains simple yet meaningful leak information.

ORTOMAT CLASSIC SYSTEM structure

Structure

The loggers send the measurement data to an ORTOMAT controller and from there the data can be transferred to a computer and even uploaded to the web application INFRAPORT. The data can be viewed from anywhere using a smart device (smartphone, tablet, notebook, PC, Mac).

Specifications

Logger

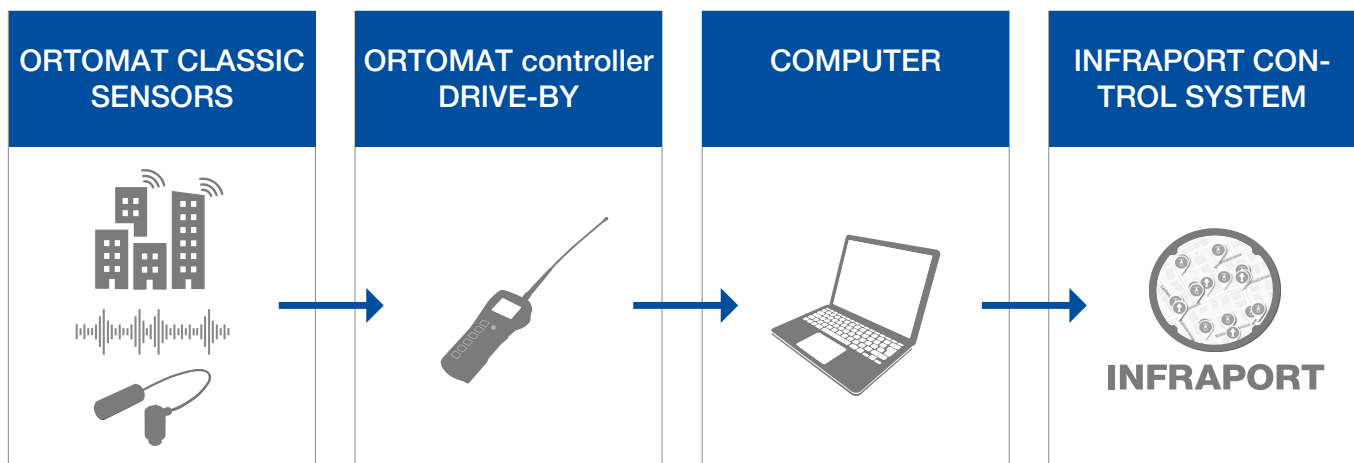
- Available in 2 versions: 1-part and 2-part.
- The loggers use a transmission frequency of 433 MHz and have an average range of 30 m
- With the standard settings the autonomy of the loggers is approx. 5 years
- The configuration is performed via a RFID interface

ORTOMAT controller

- Graphic display for the display of measurement data from up to 32 days
- Receiving measurement data and alarm values are displayed immediately by means of beeps
- Direct reading of leak / no leak in the field
- Data transfer to PC using USB for detailed analysis with the software

Software

- ORTOMAT CLASSIC software: Programming of the loggers and analysis of the measurement data
- ORTOMAT CLASSIC UPLOADER: Measurement data analysis and synchronisation with INFRAPORT



Installation methods

Every mechanical connection to the pipeline network can be used as a measuring point.

Thanks to the small dimension, various 1-part or 2-part designs (remote sensor), as well as the magnet adaptation, a fast and simple installation of the devices in gate valve shafts, hydrants or even directly at the water pipe is possible.



Measuring principle

Thanks to the simple and diverse installation options, the ORTOMAT CLASSIC noise loggers are installed in the water supply system so that the distribution network with its supply lines is monitored for leak noises either comprehensively (permanent leak detection) or always only in zones (mobile leak detection). The aim is to analyse the sound structures at night between 02:00 and 04:00 (main measurement) when water consumption is at its lowest and the networks are quiet.

ORTOMAT CLASSIC noise loggers are equipped with a microprocessor and intelligent software, which decide directly after the measuring period whether there is a leak or not. This information, as well as the lowest noise level during the measuring interval, are saved and are available for the wireless reading by means of an ORTOMAT controller of the water supply.

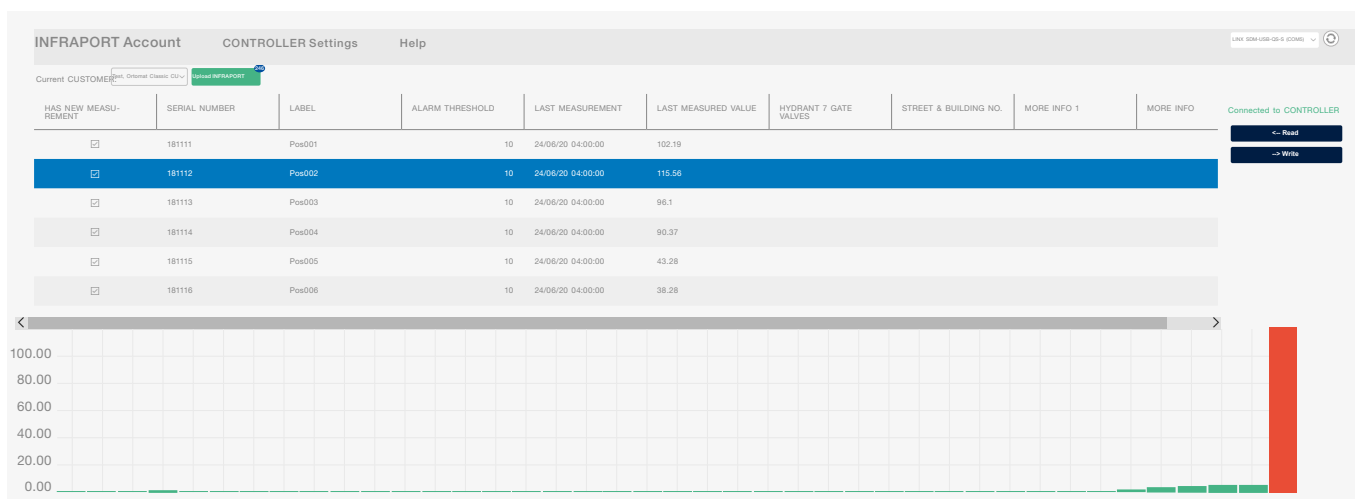
Data visualisation

On the one hand, the measurement data can be viewed and evaluated directly in the field on the display of the ORTOMAT controller. Data from up to 32 days can be displayed and viewed numerically and / or graphically.

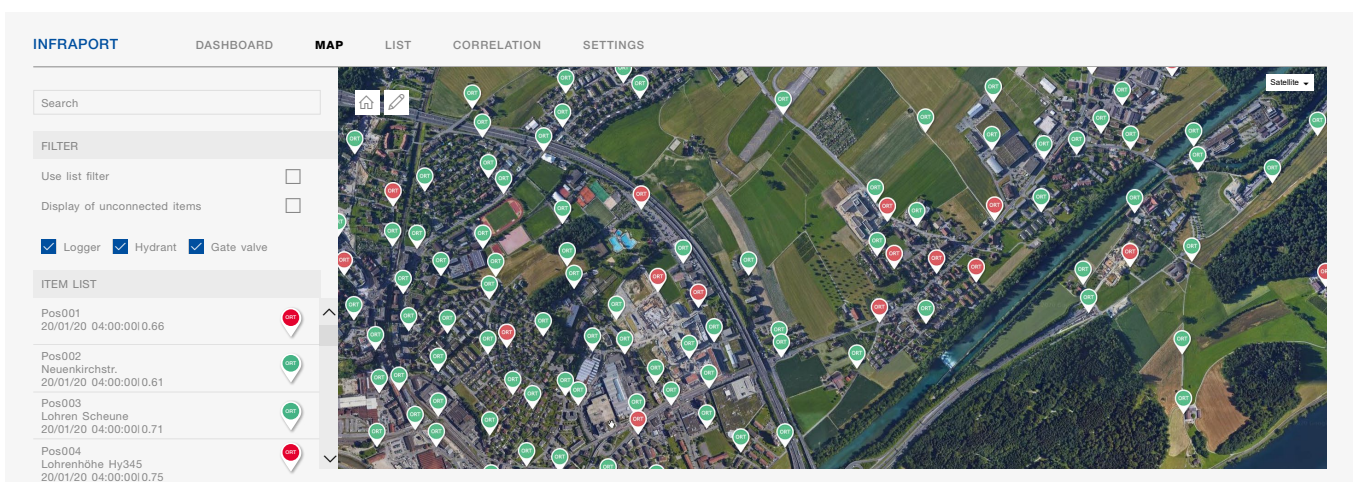
On the other hand, the information of the monitoring system in the ORTOMAT PC software can be displayed and managed.

ORTOMAT CLASSIC UPLOADER / INFRAPORT

For even better visualisation and in particular for the centralisation of all key information about the entire pipeline network. The measurement data stored in the controller can also be displayed and analysed locally with the ORTOMAT CLASSIC UPLOADER before it can be synchronised with our web visualisation portal INFRAPORT.



As a fully open system, the INFRAPORT allows the integration of plans from a GIS and the visualisation of the position and details data of all installed loggers. This data can also be exported for any type of use.

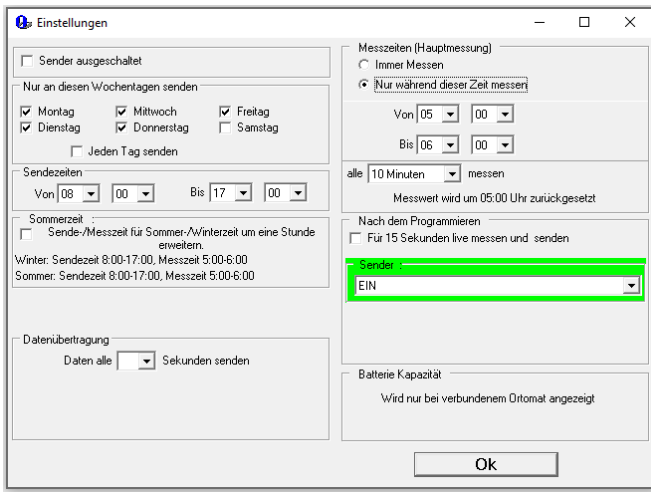


Logger configuration

This can be changed using an RFID interface. The devices must be removed but the adaptation can be performed on site.

The configuration of the loggers can be customised, the following parameters can be changed.

- Measuring period and measuring interval
- Activation of the radio transmitter for the data reading
- Day, time and interval for sending the measurement results.
- Consideration of summer/winter time




Data acquisition

The evaluated measurement data is saved in the ORTOMAT CLASSIC and is available for the data reading during the programmable transmission times. The data is received and stored temporarily in the field of the ORTOMAT controller. The noise logger can be read conveniently in Drive-By mode. A measuring point is barely reached and a beep sounds on the controller signalling that the measurement data is stored in the memory, followed by another acoustic signal indicating whether a leak was detected at this measuring point or not. The measurement data can be transferred to a PC using a USB for analysis, better visualisation and back-up.

The benefits for you

- Mobile or permanent early leak detection
- 2 versions available: 1-part and 2-part
- Meaningful analysis with measurement results which are easy to interpret, "optimal quality/price/performance ratio"
- Completely independent of private or public wireless networks (LORA, WLAN, NB-IoT, Mobilfunk, etc.), can be used everywhere
- No structural or mechanical work during installation
- Easy system expansion possible
- ORTOMAT CLASSIC leak monitoring systems are used worldwide and have been tried-and-tested thousands of times (> 45,000 pc.)