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FAST
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Performance of drinking water supply networks

2024 CATALOGUE



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The challenges of drinking water

Droughts, floods, the quality of aquatic environments, the condition of water and wastewater infrastructures... the increasing pace of change around the world is having a major impact on water management (population growth, economic development and changing consumption patterns).

Climate change is likely to slow or hinder progress in providing safe drinking water and sanitation to billions of people around the world.

All this means that energy resources need to be managed more wisely and water efficiency needs to be improved (e.g. detection and remediation of faults and water losses).

Over the last century, worldwide water use has increased 6-fold, and continues to rise by almost 1% a year.

Against this background, it is essential to place the management of water resources at the very forefront of our priorities.

The first step towards improving network efficiency to contribute to its sustainability and provide a trouble-free service involves installing reliable products made from high-quality materials and proven expertise. Monitoring (measuring parameters and detecting anomalies), supervision (prioritising work and maintenance) and remote action (control) also help to improve the safety of the water supply, and help to improve the management and performance of water networks in order to safeguard resources.

5.3 billion

people use a safe drinking water supply service

52%

of the world's population will be living in conditions suffering from water stress by 2050



A large, white, cylindrical water tower with a metal lattice structure supporting it, set against a clear blue sky with scattered white clouds. The tower is positioned on the left side of the frame, and the sky fills the rest of the background.

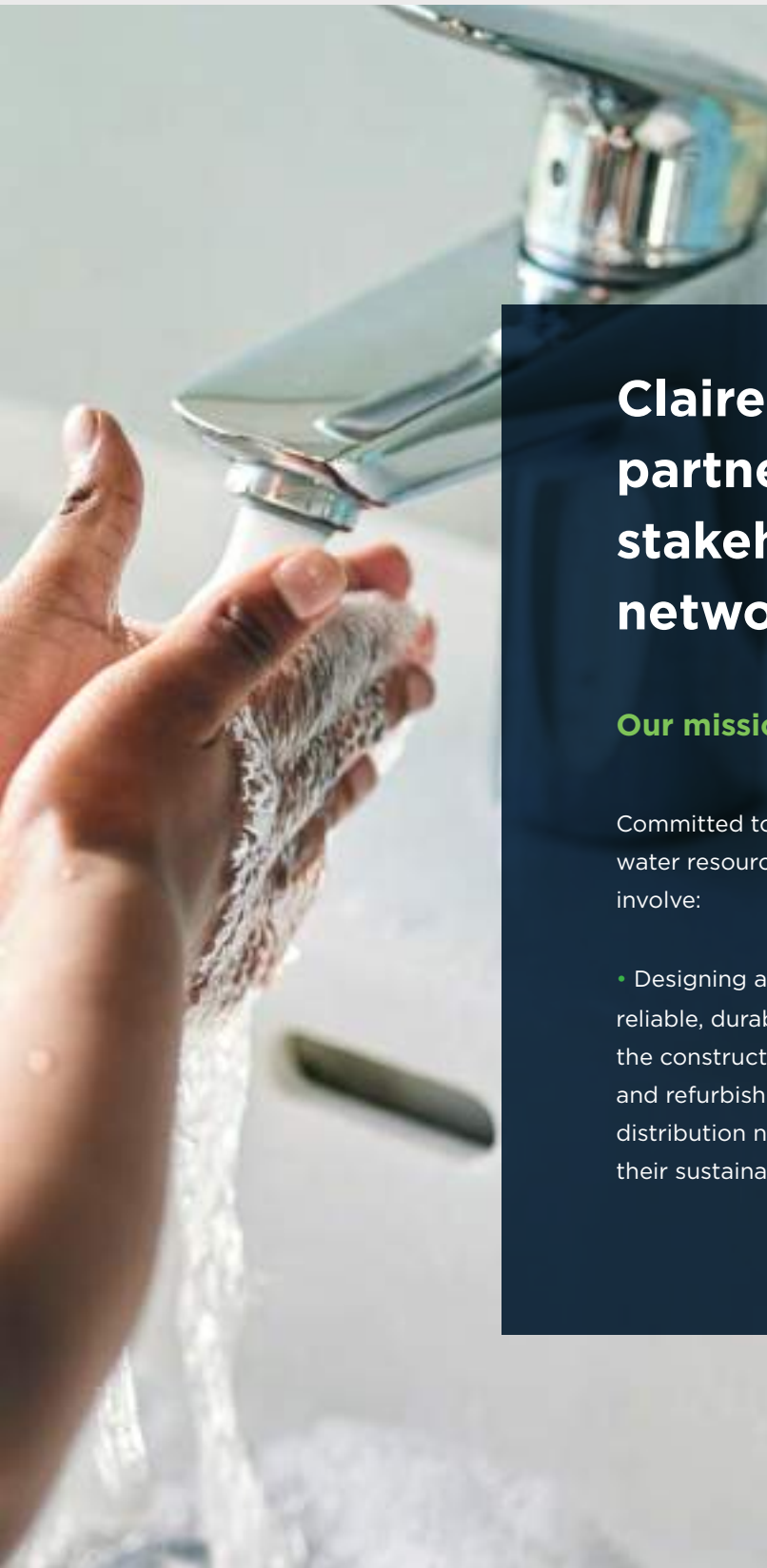
30%

of the world's population
does not have access
to drinking
water infrastructures



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**Let's conserve
the resource together
for future generations**



Claire Group, a trusted partner of water stakeholders serving network performance

Our mission: Conserving Water resources

Committed to conserving water resources, our actions involve:

- Designing and manufacturing reliable, durable equipment for the construction, maintenance and refurbishment of water distribution networks to ensure their sustainable efficacy

- Developing products for diagnostics, monitoring and management to improve the water network performance

- Providing resources and information to allow everyone to optimise their use of water



SAÏNTE-LIZAIGNE GROUPE CLAIRE

Equipment and management
for the drinking water network
and irrigation



E.I.E GROUPE CLAIRE

Intervention solutions without
cutting off the water networks



HYDROMÉCA GROUPE CLAIRE

Customised metering systems
and tools



claiRE

Drinking water



Natural water



Waste water





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Independent and connected measurement and recording systems for water monitoring



FAST
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Equipment to detect and locate leaks



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- BRANCH CONNECTIONS & ISOLATION
- CONSUMER HOUSE CONNECTION
- METERING ENVIRONMENT
- REPAIR & CONNECTION
- TOOLS AND MAINTENANCE



FIND PRODUCTS AND SOLUTIONS
in this catalogue dedicated to
**Equipment for drinking water
supply networks**



SAÏNTE-LIZAIGNE
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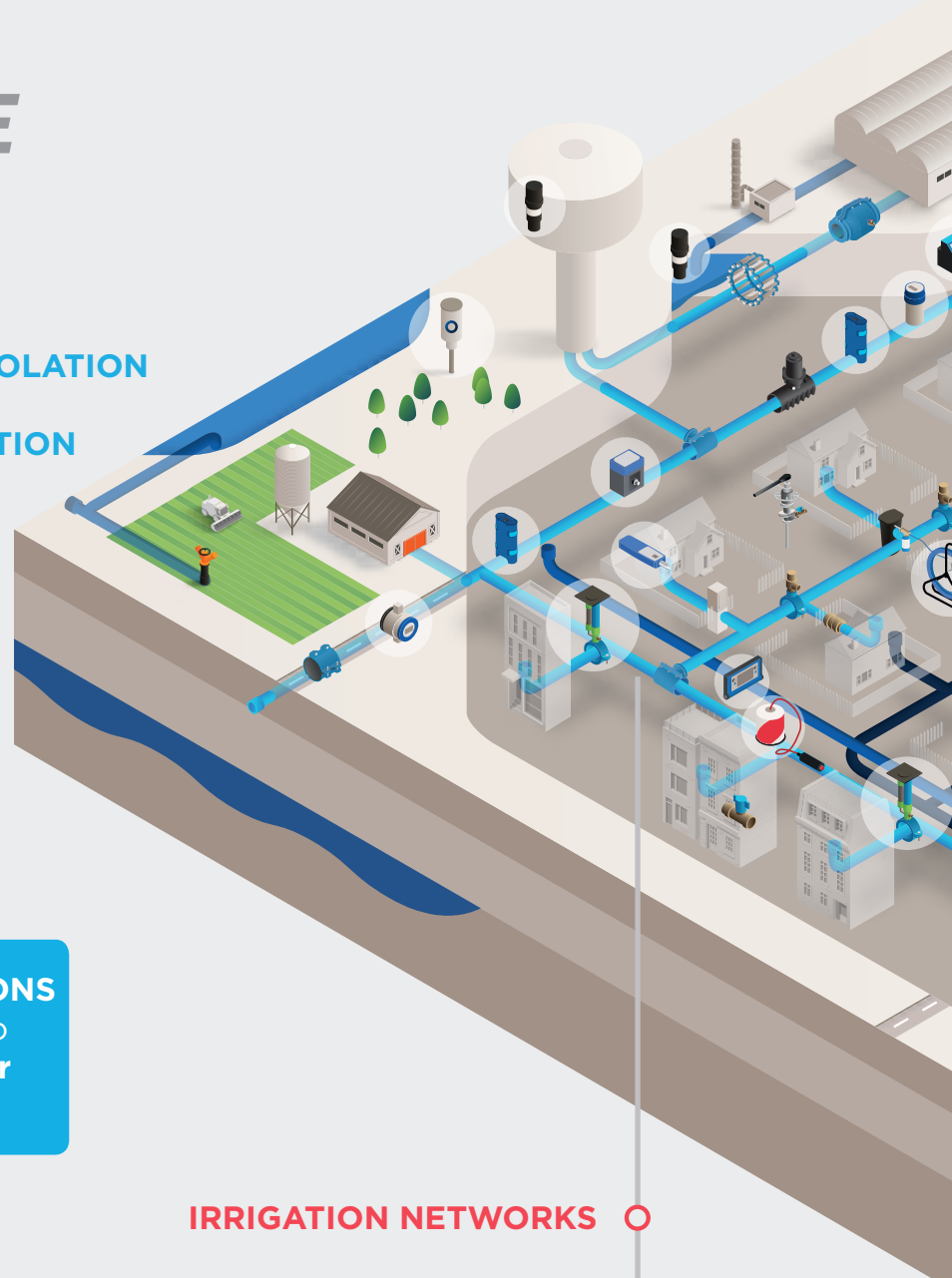


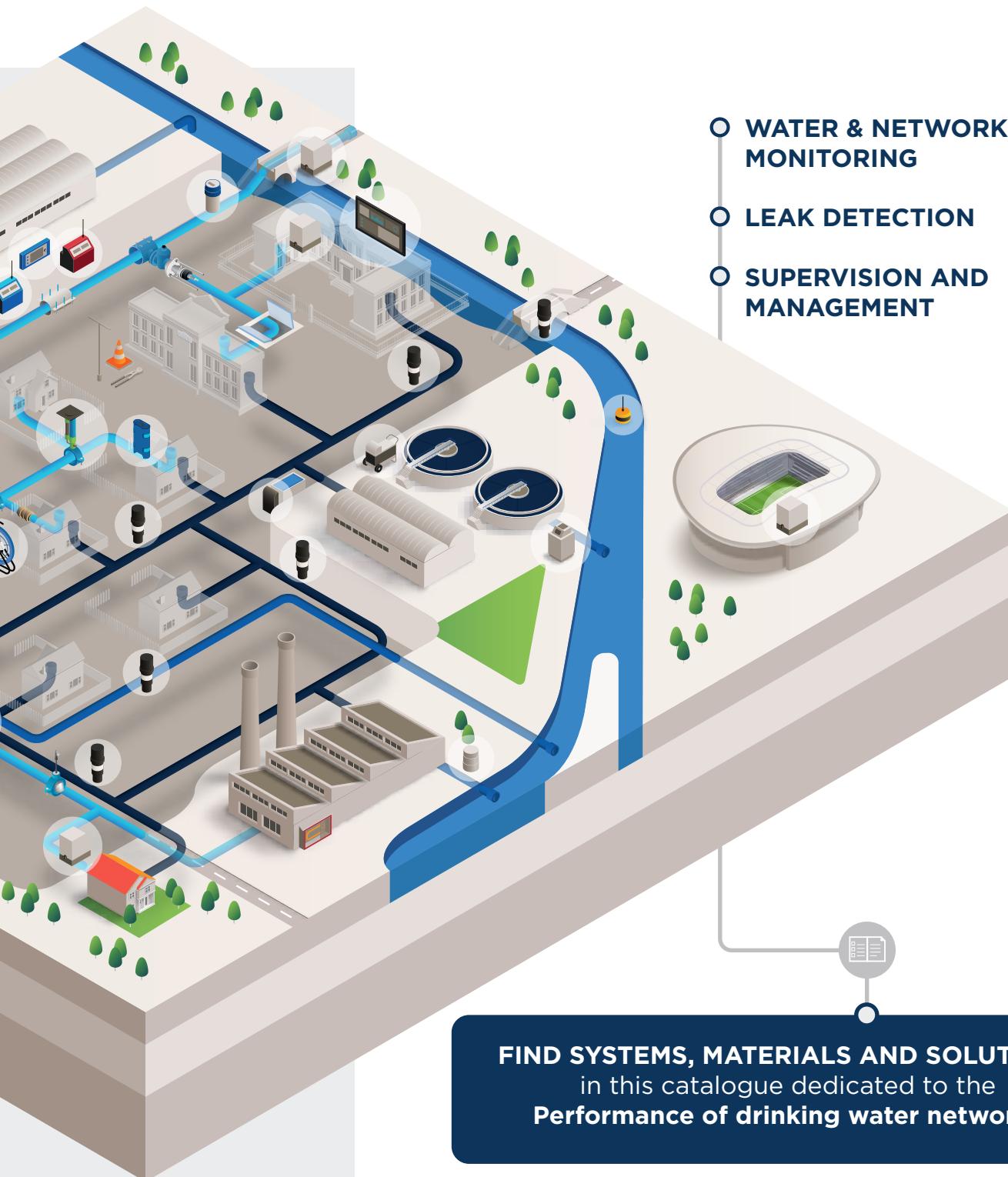
HYDROMECA
GROUPE CLAIRE

IRRIGATION NETWORKS ○

**WATER NETWORKS FOR
COLLECTIVE HOUSING** ○

INDUSTRIAL GAS NETWORKS ○





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SAINTE-LIZIGNE
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WAYVE
GROUPE CLAIRE

Our services

Claire training centre

A customised training programme is offered to operators, installers and design offices, etc. on the Sainte-Lizaigne campus. With themed or customised modules, it allows teams to learn effectively in real-life conditions.

Quality support

- Showroom + dedicated training premises
- 600 m² outside space in real-life conditions
- 300 m of different pipes including Claire group products and combining PE, PVC and cast iron pipes

Simplified logistics

- Training centre based in central France
- On-site catering services
- Option to arrange accommodation

A customised offer

- Various modules are available: water management, house connection, leak detection, Wayve, etc.
- A customised programme tailored to your project
- Partners to enrich the range



Online services

Claire Group is a combination of skills, expertise and people who work hard every day to preserve Water resources. Claire invites you to learn all about its mission, initiatives and solutions to tackle the challenges related to water by visiting its dedicated website **groupe-claire.com!**

Claire's multilingual teams offer a wide range of equipment and solutions to support you in your projects for construction, renovation, leak detection and water network monitoring.

It also contains information about the group, new products, our presence at trade fairs, industry events and our latest news.



Rental / After-sales service and assistance

The Ijinus rental service

can provide a range of equipment for measurement campaigns.

Ijinus, FAST and Wayve after-sales services and assistance

help users to get their connected products up and running. They also provide technical support during servicing and maintenance operations, and refurbish certain equipment.

Our brands



Ijinus is specialised in the development of **autonomous and smart measuring and data logging systems to monitor water**: metrology equipment, automated water samplers, sensors and data loggers connected to a supervision application and platform.

ijinus.com



Sainte-Lizaigne specialises in equipment for drinking water networks and irrigation, which it designs and manufactures in France, and markets in France and abroad. Its range includes products for consumer house connections, general connections and the metering environment as well as solutions for diagnostics (SENSE network access point) and managing water supply networks.

Raw water metering and distribution equipment are available under the SL-Irrigation brand.

Sainte-Lizaigne also markets FAST leak detection equipment in France.

sainte-lizaigne.com



The FAST company, based in Germany, supplies systems and **equipment for detecting and locating leaks**: BIDI loggers connected to a tablet or platform to **monitor** installations, AQUA M60 compact leak **pre-locating** device, AQUA M300 universal acoustic method and tracer gas solution, LOKAL 400 multi-purpose **correlator**, PIPEMIC leak detection and pipe tracing device.

fastgmbh.de



The Wayve solutions, developed by **Sainte-Lizaigne, propose systems to supervise and control water networks**. Smart boxes can be used to optimise water consumption, minimise operating costs, limit the risks of leaks and maintain the quality of the water.

wayve.fr

• **Our catalogue includes products and solutions for consumer house connections** (tapping valves, clamps and saddles), the metering environment (manholes, hydrants, water meter valves), connections and tools.



[Equipment for drinking water supply networks](#)

Diagnostics

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detection**

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Main contents

Conserving resources

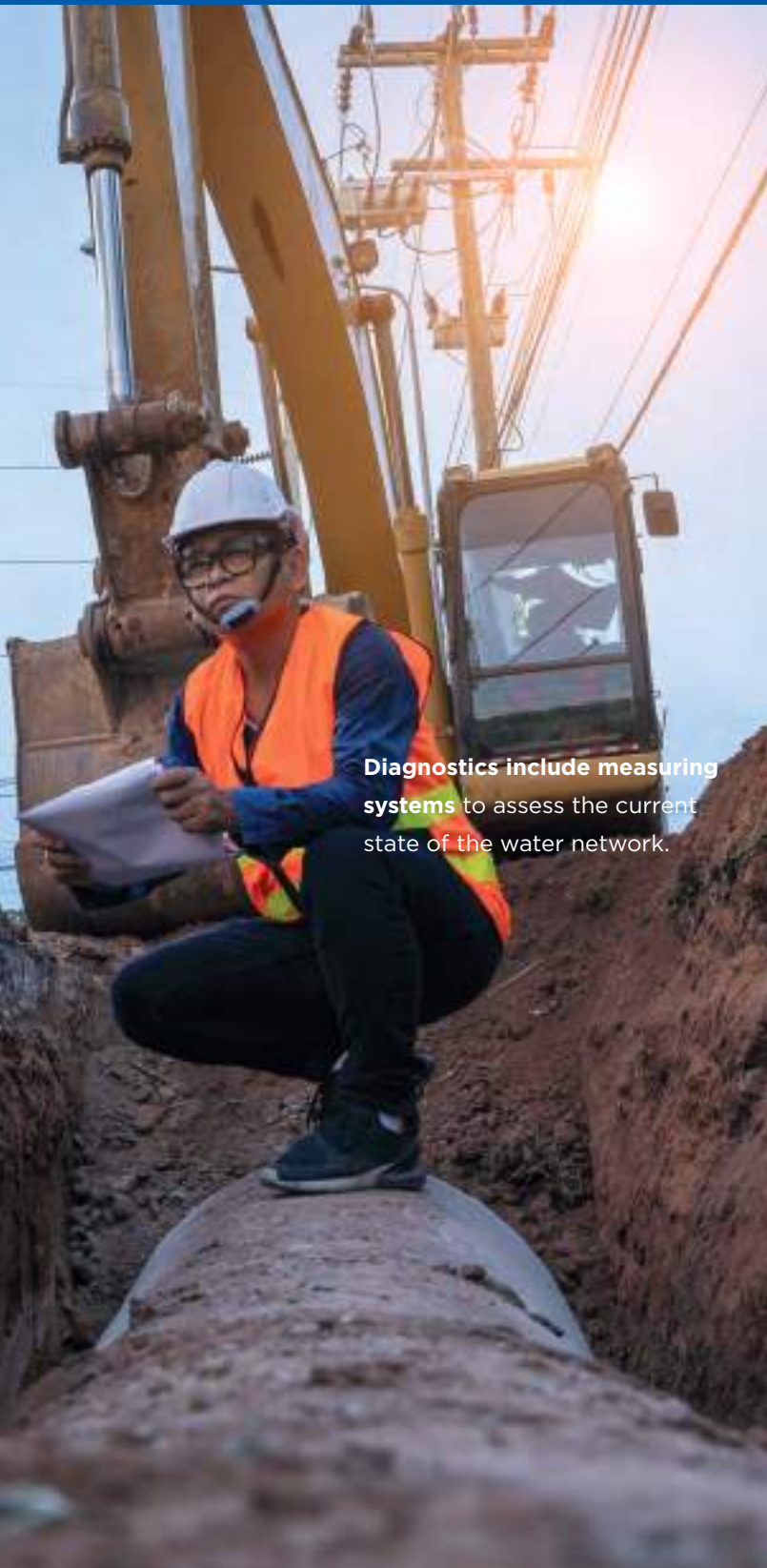
To safeguard the sustainability and performance of the drinking water supply network, which is a community asset, monitoring facilities are required.

By monitoring certain parameters such as pressure, flow and noise, diagnostics on the deterioration of the water network, its infrastructure and

equipment can be established, and upstream water losses can be identified together with the areas concerned. These diagnostics are essential to manage the infrastructure and to prioritise operating, response and renewal actions.

Fast and Ijinus supply equipment to cover all water supply network monitoring applications.





Diagnostics include measuring systems to assess the current state of the water network.

PRESSURE-FLOW

A **self-contained flow and pressure logger** with built-in pressure sensor, for **sectorisation, LOG BLUE LP**, see p.16



NOISE-PRESSURE

A **single access point to detect and pre-locate leaks, control pressure or monitor temperature** see p.20



PRESSURE

A **pressure and temperature data logger** for **network diagnostics, DRULO III**, see p.22





Flow and pressure data logger with built-in pressure sensor LOG BLUE LP

The LOG BLUE LP is a multifunction data logger for all sectorisation applications. With its internal pressure sensor, it can be used to quickly set up pressure measurement at fire hydrants, without affecting the smooth running of the drinking water network, and can be connected to a second pressure sensor. It can also be connected to electromagnetic flowmeters to measure flow rates and be used for fast metering.

The pressure sensor is built into a data logger LOG BLUE, which logs and transmits data from sensors and equipment by radio or cellular network.

Advantages

Complete sectorisation at a single monitoring point: pressure, metering, flowmetering, control of a stabiliser or control valve

Quick and easy to install: built-in pressure sensor, compact data logger

Battery-powered

Quick to connect

Wireless communication and remote data transmission

Upgradeable with communication networks

Easy to maintain



Where should it be installed?

- Fire hydrants
- Pipe saddles
- Connection to electromagnetic flowmeter via MODBUS
- Connection to the transmitter head of water meters

Additional products



Technical characteristics

- ___ **Memory:** 500,000 measurements
- ___ **Pressure sensor:** 0-25 bar integrated
- ___ **Data read in real time by radio**
- ___ **Communications (depending on model):**
Radio, 2G/4G (LTE-M, NB-IoT)
- ___ **Configuration:** wireless by radio or remotely using the communication board
- ___ **Report:** CSV, Excel
- ___ **IP68 seal:** 1 bar / 30 days
- ___ **Certifications:** NSF/ANSI 61/372
- ___ **Compatibility with meter transmitter heads** (2 pulse inputs up to 100 Hz)
- ___ **Compatibility with MODBUS flowmeters:** Siemens Mag 8000, Badger Meter M5000, Krohne Waterflux, ABB Aquamaster 3 and 4
- ___ **An open-collector output** to drive a control device

Designation

- 1** **Connecting hose**
- 2** **Connecting plug**
- 3** **WIJI connection kit** to set up and retrieve data locally by radio using the AVELOUR software (see p.88)
- 4** **IJITRACK web platform** to display and process data from sensors and data loggers, set alerts, etc. (see p.66)
- 5** **Cyble sensor** to monitor metering flows in pulse mode
- 6** **Adaptors: Y connector or junction box**
- 7** **LOG BLUE mounting bracket**





LOG BLUE autonomous flow and pressure data logger

The LOG BLUE is a multifunction data logger for all sectorisation applications. It can be used to connect a sensor to monitor pressure in the drinking water network.

It can also be connected to electromagnetic flowmeters to measure flow rates and be used for fast metering.

LOG BLUE logs and transmits data from sensors and equipment by radio or cellular network.



Advantages

Complete sectorisation at a single monitoring point: pressure, metering, flowmetering, control of a stabiliser or control valve

Easy to install: compact size

Battery-powered

Wireless communication and remote data transmission

Upgradeable with communication networks

Easy to maintain

Where should it be installed?

- Connection with pressure sensor
- Connection to electromagnetic flowmeter via MODBUS
- Connection to the meter transmitter head



Additional products



Technical characteristics

- ___ **Memory:** 500,000 measurements
- ___ **Pressure sensor:** measuring range 0-10, 0-20, 0-35 bar, output signal 4-20 mA
- ___ **Configuration:** wireless by radio or remotely using the communication board
- ___ **Communications (depending on model):** Radio, 2G/4G (LTE-M, NB-IoT)
- ___ **Report:** CSV, Excel
- ___ **Compatibility with meter transmitter heads** (2 pulse inputs up to 100 Hz)
- ___ **Compatibility with MODBUS flowmeters:** Siemens Mag 8000, Badger Meter M5000, Krohne Waterflux, ABB Aquamaster 3 and 4
- ___ **An open-collector output** to drive a control device

Designation

- 1 CPA sensor** to measure absolute pressure
- 2 WIJI connection kit** to set up and retrieve data locally by radio using the AVELOUR software (see p.88)
- 3 IJITRACK web platform** to display and process data from sensors and data loggers, set alerts, etc. (see p.66)
- 4 Battery pack** for over 10 years of battery life (1 measurement/h and 1 transmission/day) (see p.90)
- 5 Cyble sensor** to monitor metering flows in pulse mode
- 6 Adaptors: Y connector or junction box**
- 7 LOG BLUE mounting bracket**



SENSE network access point

SENSE is a single access point to continuously monitor the entire network: detect and pre-locate leaks, monitor temperature, control pressure, etc.

Based on a conventional house connection, the SENSE system is easy to install and can be used to build up a dense network. Once installed, the sensor remains accessible and is easy to replace. The solution gives the operator a much clearer picture of the network and facilitates management of its resources.



Advantages

Autonomous, multi-purpose single access point: leak detection, particularly on plastic pipes, pre-location of leaks followed by multi-point correlation, pressure control, temperature monitoring, etc.

Easy sensor replacement

Dense network coverage using consumer house connections

Simple to install: conventional tapping connection

Precise, continuous monitoring

Infrastructure management of the drinking water network: monitoring points, performance monitoring, leak detection, ageing condition

Where should it be installed?

- In place of a consumer house connection
- In a dedicated or existing manhole

Additional products



Designation

- 1** **SENSE 20 B01:** SENSE network access point on DN20 house connection. Plug version, ready to receive a sensor. Supplied with SENSE curb box, couplings for pipes and removable transmitter mounting bracket
- 2** **SENSE 20 HYDRO F01:** SENSE network access point on DN20 house connection. Hydrophone sensor version. Supplied with SENSE curb box, couplings for pipes and removable transmitter mounting bracket
- 3** **SENSE CAB BIDI HYDRO F01:** 2.50 m cable with hydrophone to be installed on SENSE, with transmitter to be connected to the cable
- 4** **SENSE Service Master:** Bluetooth radio interface between transmitter and tablet
- 5** **SENSE tool:** Tool to work on sensor
- 6** **SENSE CABLE PRESS F01:** Cable with pressure sensor to be installed on SENSE
- 7** **SENSE FLEX HYDRA:** Sampling, injection (gas or disinfectant) or pressure measurement kit (data logger, pressure gauge, test pump)



DRULO III pressure and temperature data logger

DRULO III measures the pressure and temperature of the water network.

With its built-in data logger, it stores up to 1.8 million measured values.

This monitoring function, which is made easier by the device's rapid installation and simplified data reading and analysis, contributes to network diagnostics, helps optimise operating costs and gives the operator the ability to respond quickly if an anomaly is detected.



Advantages

LCD screen for on-site pressure and temperature display

Configure, collect and read data using an Android tablet or smartphone via Bluetooth (Application can be downloaded free of charge from the Play Store)

Pressure value displayed in real time

Files can be exported by e-mail in Excel and/or PDF format, then viewed and formatted on the PC in the form of tables or graphs

Inductive charging using the dedicated base (no connector)

Recording capacity of 1.8 million data records

Measuring interval can be adjusted from 1s to 24H

High-precision measurement for pressure tests (millibar)

Long-life lithium battery (1 charge = 2.5 million points recorded)

Portable device and fast to fit: 1/2 and pressurised connections (0-20 bar, 30 bar on request)

Where should it be installed?

- Valves
- Hydrants and fire hydrants
- Consumer meters
- Stop valves

Equipment



1



2



3



4



Designation

- 1** DRULO III pressure and temperature data logger (LCD screen, wireless induction charging)
- 2** Free downloadable **tablet and smartphone application** (Android) to set up recordings and analyse data
- 3** DRULO III carrying case
- 4** Charging base

Uses

- ___ Pressure and seal testing on new pipes
- ___ Network load relief testing
- ___ Measuring load losses
- ___ Consumer pressure test
- ___ Sectorisation: network pressure monitoring campaigns





Transit time flowmeter

The transit time is a portable ultrasonic flowmeter that calculates the flow of water as a function of its velocity.

Through specific and efficient signal processing, this portable flowmeter offers high performance measurement capabilities under all conditions.

It is used for temporary or permanent measurement campaigns, to estimate leakage rates, monitor pump flows and monitor in-line flowmeters.



Advantages

- Non-intrusive and easy to use
- Easy to use with Minisonic II's new processor and improved performance
- User-friendly with the installation assistance feature
- Lightweight and portable (less than 750g)
- Robust with an IP68 ABS casing

Where should it be installed?

- Drinking water supply pipes
- Pumps
- Flow meters

Additional products

1



2



Technical characteristics

- ___ **Memory:** 2 GB
- ___ **10 flow calculations/s**
- ___ **Data retrieval** via USB
- ___ **Pipe diameter:** 10 to 10,000 mm
- ___ **Easy-to-read OLED graphic display**
- ___ **Autonomy:** >70 hours continuous and more with sequencer function
- ___ **Automatic on-site 0-point calibration**
- ___ **Technology:** transit time ultrasound - continuous and two-way measurement
- ___ **Diagnostic assistance:** oscilloscope function (echo display), gain, quality index, alarms
- ___ **Temperature range:** -20°C to 50°C and 0°C to 45°C under load
- ___ **Seal:** IP68
- ___ **Dimensions:** 220 x 115 x 74 mm

Designation

- 1** **External probe kit** to be applied to the pipe to measure the flow through it
- 2** **LOG BLUE DATA LOGGER** to collect data via a 4-20mA signal or to perform fast pulse metering

AVAILABLE FOR RENTAL ONLY



Wireless level sensor LNU06

The LNU06 is an acoustic imaging ultrasonic level sensor, which is ideally suited to measuring water levels in harsh environments.

It can be used to take accurate level measurements to provide information on the water level in water towers and will give an alert if a critical threshold is reached, for sustainable management of the drinking water supply network.



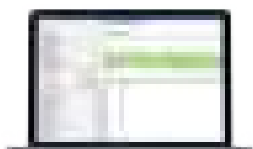
Advantages

- Widely acclaimed for its measurement accuracy
- Easy to maintain: not directly in contact with water
- Compact all-in-one: sensor / data logger / communications
- Fully autonomous: long-life battery, data logger and built-in modem
- Easy to install and use: safe programming by radio without actually having to touch the sensor

Where should it be installed?

- Water towers

Additional products

12345

Designation

- 1 **AVELOUR software** to swiftly program sensors and to retrieve, analyse and export data (see p.64)
- 2 **WIJI connection kit** to set up and retrieve data locally by radio using the AVELOUR software (see p.88)
- 3 **IJITRACK web platform** to display and process data, set alerts, etc. (see p.66)
- 4 **Display** to view the measured data (see p.98)
- 5 **Mountings:** clamp only, single or double plate with clamp (see p.96)

Technical characteristics

- ___ **Memory:** 500,000 measurements
- ___ **Autonomy:** 5 years on average for 1 measurement every 10 minutes and 1 transmission per day
- ___ **Measuring range:** 0.3 m to 6 m
- ___ **Configuration:** wireless by radio
- ___ **Communications:** Radio / GSM / GPRS / LTE-M / NB-IoT
- ___ **Seal:** IP68

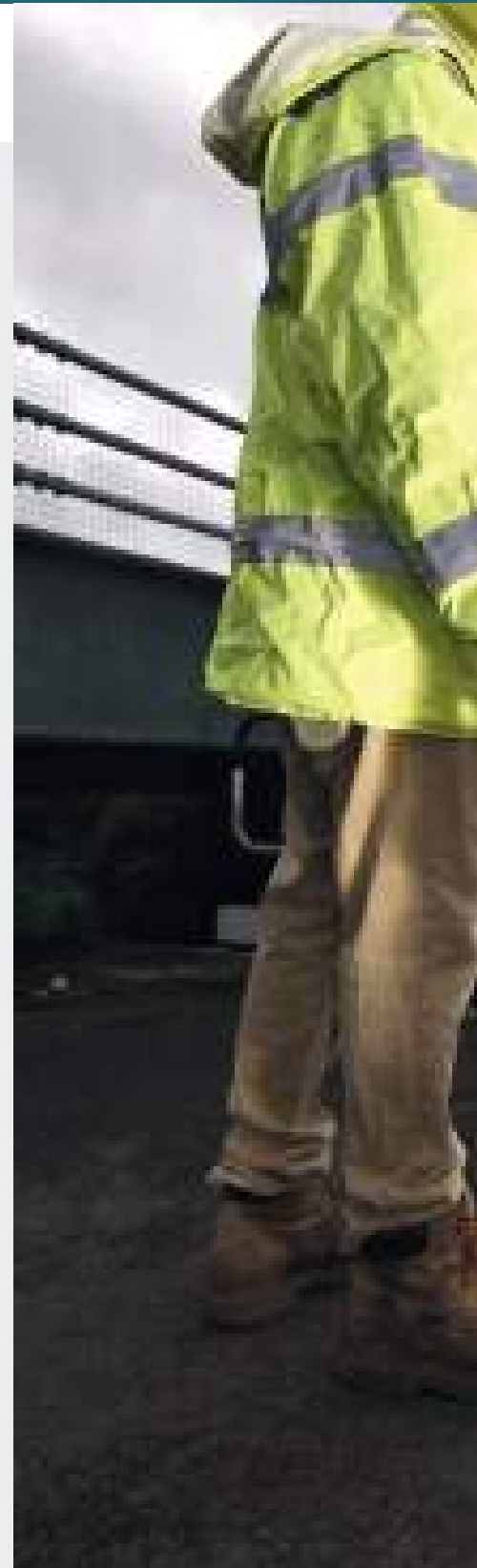
Conserving resources

Network diagnostics are completed by knowledge of the infrastructure.

Detection equipment provides better knowledge of the water supply network and facilitates earthworks or leak detection.

It is essential to use equipment such as pipe detectors and metal detectors before any work is carried out, and to make the work safe.

Fast provides detection equipment to prepare your work.





Detection encompasses the equipment required to locate underground structures and networks: pipe detector, metal detector.

PIPES

PWG II, a pulse generator to detect all types of pipes, see p.30



METAL MASSES

MD 100, a device that locates pipes, valve boxes and valve operating nuts, see p.32





Pulse generator PWG II

The PWG II is used to detect pipes in the drinking water supply network. It generates acoustic waves in the water flow, which means that it is effective on all types of materials, including plastics. It is designed to work in the field and provides reliable route tracing.



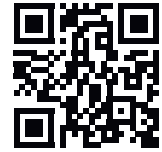
Advantages

- Improved knowledge of water networks
- No need to turn off the water
- Acoustic waves in the water flow
- No interference from other networks (electrical, etc.)
- Effective on all types of pipe materials: PE, PVC, cast iron, steel, etc.
- Locates pipe routes up to 600 m
- Long operating time
- Easy to install with quick coupling
- Compatible with all commercially available acoustic equipment

Where should it be installed?

On the water column:

- hydrants and fire hydrants
- consumer meters
- directly on the pipe using a pipe saddle/clamp



Equipment

1



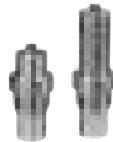
2



3



4



5



Designation

- 1 Pulse generator PWG II
- 2 Complete PWG kit in carrying case
- 3 Fire department quick coupling
- 4 Power calibration pistons
- 5 Charger

Technical characteristics

- ___ **Range:** up to 600 m
- ___ **Nominal operating pressure:** max 8 bar
- ___ **Connection:** fire department quick coupling





Ferromagnetic metal detector MD 100

The MD 100 is a simple device for detecting metal masses. It locates networks and access points (metal pipes, valve boxes and valve operating nuts) to make work easier.



Advantages

Simple identification of metal pipes and access points to the network (valve boxes and operating nuts)

Great detection depth (up to 3 m)

Lightweight and ergonomic design for optimal comfort during prolonged use

High sensitivity for reliable detection of small, deeply buried objects

Easy to use with touch buttons and LCD display

Where should it be installed?

- All environments

Equipment



1



2



3



Designation

- 1 Ferromagnetic metal detector MD 100
- 2 Carrying bag
- 3 Replacement batteries



Conserving resources

Water loss represents a significant economic and resource-related challenge.

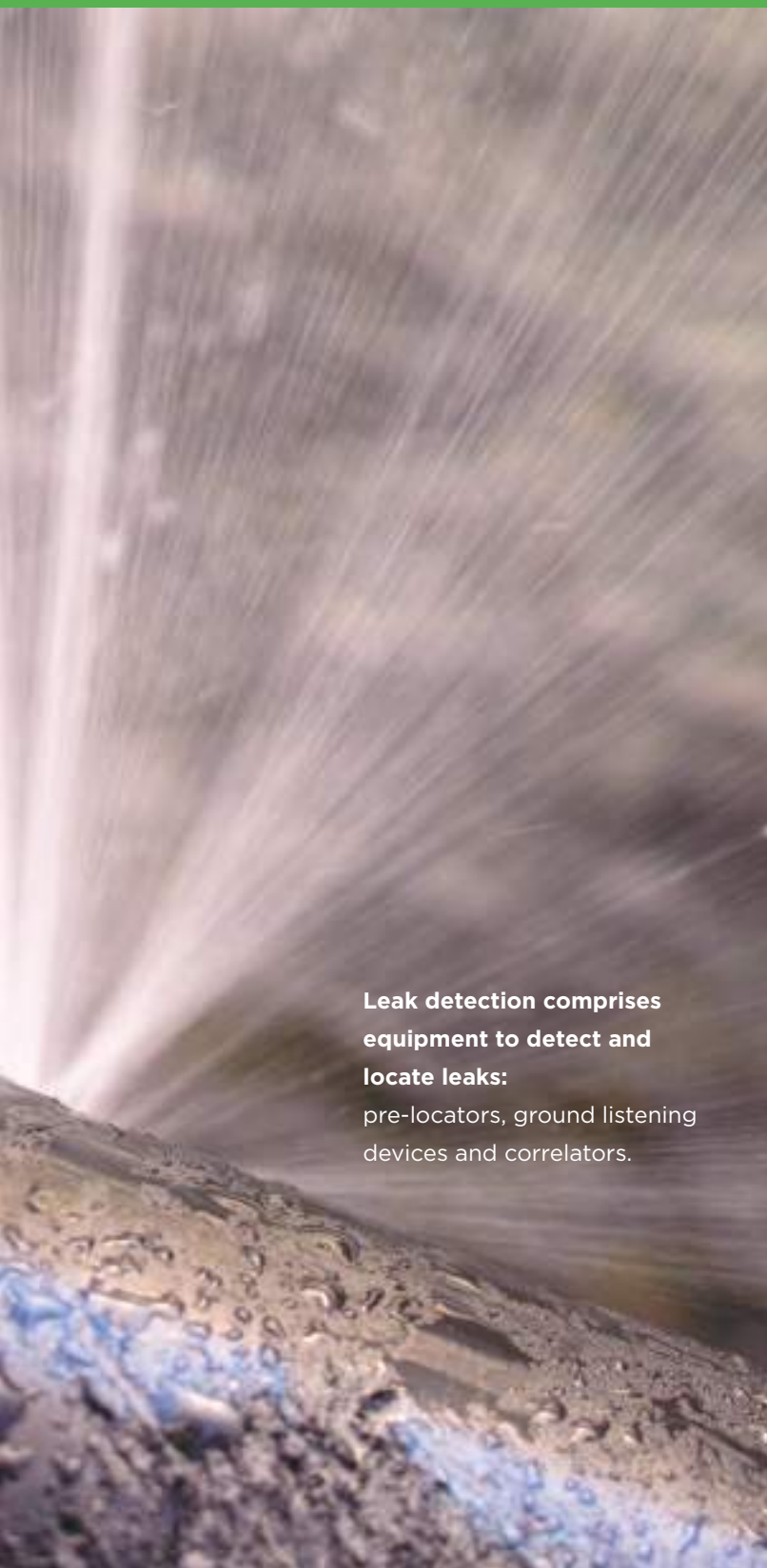
Water leaks affect operating costs (excess production, etc.), health and have consequences for users (disrupted or degraded service, as well as damage). Active leakage detection, as well as management of the infrastructure, and a speedy response will help to reduce water losses and contribute to

the performance of the water supply network, while conserving resources.

There are three steps to leak detection: pre-locating by identifying suspicious areas on the network, then correlating by quickly locating the leak area, and finally, pinpointing that confirms the leakage point using ground listening accessories.

Fast supplies a full range of equipment to detect and locate leaks reliably and easily.





Leak detection comprises equipment to detect and locate leaks:
pre-locators, ground listening devices and correlators.

PRE-LOCATING

BIDI pre-locators, a temporary or permanent monitoring system, see p.36



CORRELATING

LOKAL 400 a multi-purpose and upgradeable correlator, see p.50



LOCATING

PIPEMIC M, a device to locate leaks easily, especially on plastic pipes, see p.58



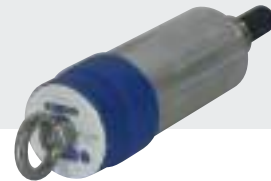


BIDI multi-purpose noise logger

The BIDI AZ pre-locator is a noise logger that pre-locates and pinpoints leaks. The pre-locators are installed in a mesh on the water supply network and form a permanent or temporary monitoring system.

They automatically log night-time noise to reduce call-out time and provide early detection of a leak. With the correlation function, which specifies the area where the leak is located, the response time is optimal.

Magnetic standard version



Hydrophone version ideal for plastic pipes

Advantages

Permanent or temporary monitoring system

Dual function: effective pre-locator + correlator

Configuration, patrol, and correlation with Android tablet or smartphone using the Service Master radio/Bluetooth interface unit

Application can be downloaded free of charge from the PlayStore

Data logging and e-mail export

Advanced operating mode: 7,200 measurements over a fully programmable night-time period, with identification of the standard minimum night-time and day-time noise levels

Configurable multi-point correlation (date, time, etc.)

Compact device with built-in antenna

Available with different battery durations, sensor types (magnetic or hydrophone) and communications (radio or LoraWan)

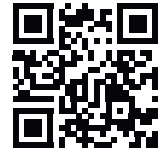
Remote meter reading possible via LoRa or GPRS network

Supervision of the pre-locator population with the WATERCLOUD platform

Where should it be installed?

- On valves and tapping valves for the standard version
- In dedicated manholes, in place of a meter or a drain valve for the hydrophone version

Equipment



Designation

- 1** **Standard BIDI pre-locator, long battery life or hydrophone version**
- 2** **ServiceMaster**, Bluetooth radio interface between transmitter and tablet
- 3** **AZA-OAD tablet and smartphone application** (free) for programming and to analyse noise data
- 4** **BIDI LoRa smart pre-locator** to transmit data directly to the WATERCLOUD (LoRaWan)
- 5** **Smartbridge** to transmit data to the WATERCLOUD and to take action remotely (remote correlation), etc.
- 6** **WATERCLOUD platform:** Supervision of the pre-locator population and analysis of noise data (see p.72)
- 7** **Carrying case and box, and accessories:** mounting rings, magnets, telescopic rod, antenna extension cable, etc.



SENSE network access point

SENSE is a single access point to continuously monitor the entire network: detect and pre-locate leaks.

Based on a conventional house connection, the SENSE system is easy to install and can be used to build up a dense network. Once installed, the sensor remains accessible and is easy to replace. The solution gives the operator a much clearer picture of the network and facilitates management of its resources.



Advantages

Autonomous, multi-purpose single access point: leak detection, particularly on plastic pipes, pre-locating of leaks followed by multi-point correlation

Easy sensor replacement

Dense network coverage using consumer house connections

Simple to install: conventional tapping connection

Precise, continuous monitoring

Infrastructure management of the drinking water network: monitoring points, performance monitoring, leak detection

Where should it be installed?

- In place of a consumer house connection
- In a dedicated or existing manhole

Additional products



Designation

- 1 SENSE 20 B01:** SENSE network access point on DN20 house connection. Plug version, ready to receive a sensor. Supplied with SENSE curb box, couplings for pipes and removable transmitter mounting bracket
- 2 SENSE 20 HYDRO F01:** SENSE network access point on DN20 house connection. Hydrophone sensor version. Supplied with SENSE curb box, couplings for pipes and removable transmitter mounting bracket
- 3 SENSE CAB BIDI HYDRO F01:** 2.50 m cable with hydrophone to be installed on SENSE, with transmitter to be connected to the cable
- 4 SENSE Service Master:** Bluetooth radio interface between transmitter and tablet
- 5 SENSE tool:** Tool to work on sensor





Monitoring system with BIDI loggers

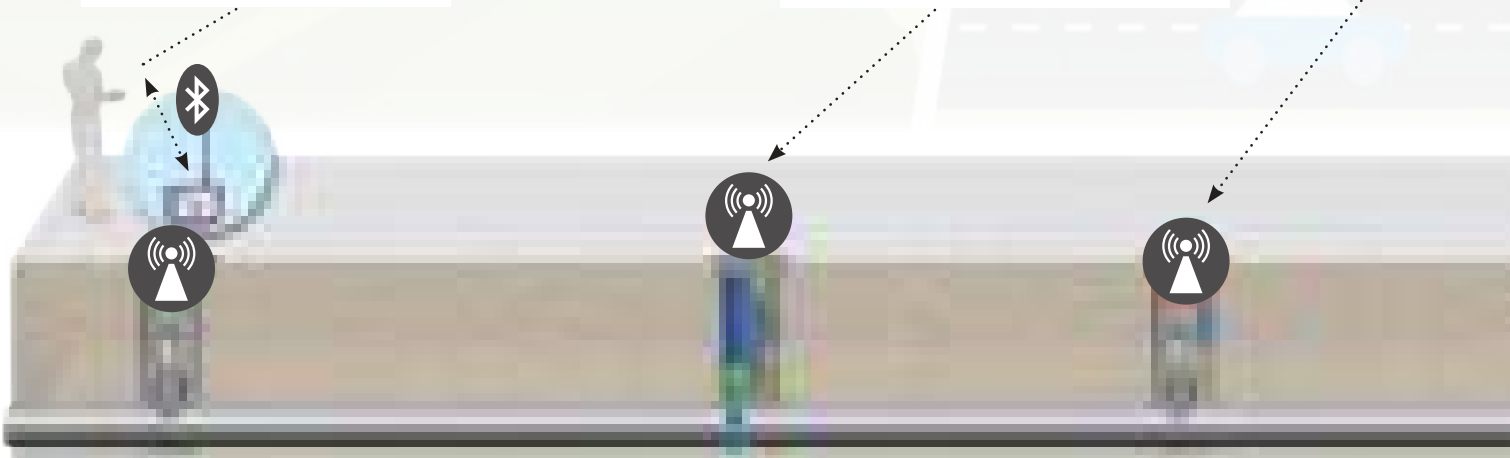


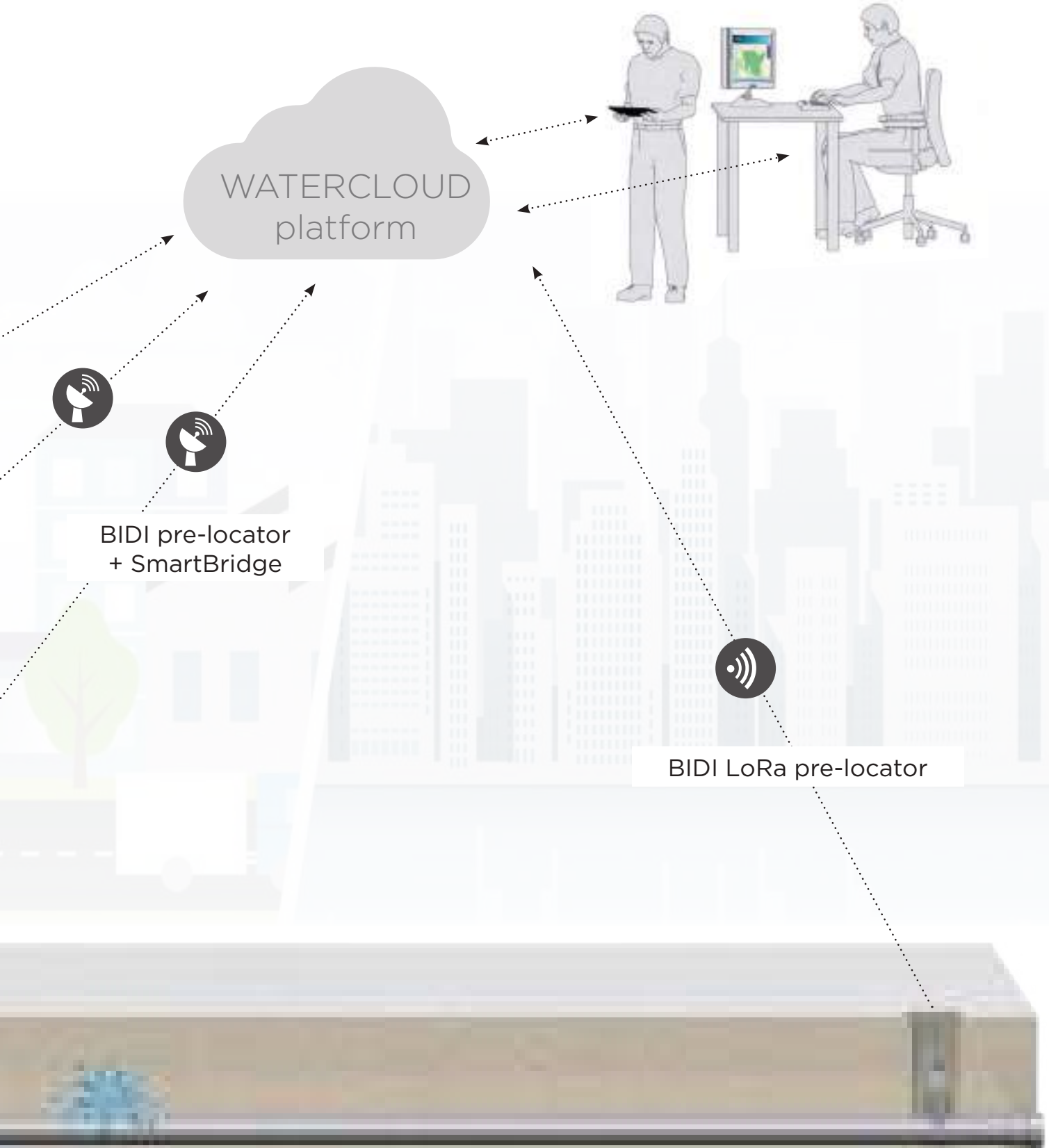
With BIDI loggers, leaks can be pre-located and correlated:

- locally using the tablet or smartphone application, via Service Master that acts as the interface between it and the radio pre-locator. The leak detector can then incorporate the data into the WaterCloud.
- remotely using BIDI LoRa pre-locators, which send noise data directly to the WaterCloud.
- remotely using the SmartBridge, which communicates with the SENSE transmitter by radio, then reports the information to the WaterCloud. This device can also be used for remote correlation.

BIDI pre-locator
+ ServiceMaster
+ Tablet

BIDI HYDRO SENSE
transmitter
+ SmartBridge





BIDI pre-locator
+ SmartBridge

BIDI LoRa pre-locator

-  radio
-  GSM
-  Lorawan



Mechanical listening device HM II

The HM II is a mechanical listening device to pre-locate leaks.

With its rugged design, it can be used to pre-locate leaks on connections, valves, hydrants and manholes using conventional methods, without electricity.

The listening cup provides optimum user comfort.



Advantages

Rugged stainless steel and aluminium design

Works without a power supply

Silicone listening cup provides comfortable measurement

No electronic components, cables or connectors

Where should it be installed?

- Service connections, valves, hydrants and fire hydrants

Equipment



1



2



Designation

1

HM II device

2

Listening extension sticks:

150 cm / 6 mm extension,

150 cm / 8 mm extension,

3-part 140 cm / 8 mm extension

Use

___ Pre-locating leaks on service connections, valves or hydrants

___ Pre-locating in deep manholes using the extensions





AQUA M40 compact leak pre-locating device

The AQUA M40 is a compact device to pre-locate leaks in the water supply network.

With an easy-to-use and compact design, this listening device is essential for everyday use. It can be used to quickly check network performance and for preventive leak detection.

High-quality listening is provided by an ultra-sensitive vibration sensor and a high-quality, low-noise amplifier.



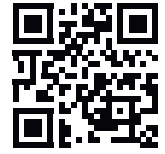
Advantages

- High sensitivity
- Lightweight and fast to use
- Convenient Bluetooth wireless technology
- High-quality listening
- Ambient noises filtered out (bass or high frequency setting)
- Effective on plastic and metal pipes
- Option of combining leakage monitoring with meter reading
- A range of accessories to adapt to conditions in the field

Where should it be installed?

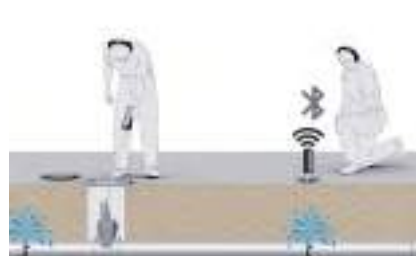
- Tight spaces
- Metering environment
- Indoor networks and installations

Equipment



Designation

- 1** AQUA M40 device
- 2** Bluetooth headphones
- 3** Listening extension sticks
- 4** **Accessories:** tripod, mounting magnet
- 5** Carrying case





AQUA M60 compact leak locating device

The AQUA M60 is a compact device to pre-locate and pinpoint leaks in the water supply network.

With an easy-to-use and compact design, this device is essential for everyday use. It can be used to quickly check network performance and for preventive leak detection. High-quality listening is provided by an ultra-sensitive vibration sensor and a high quality, low noise amplifier. Coupled with an accelerometer, the AQUA M60 becomes even more versatile.



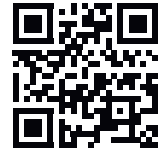
Advantages

- High sensitivity
- Lightweight and fast to use
- Convenient Bluetooth wireless technology
- High-quality listening
- Digital display of the noise level
- Filter functions to reduce ambient noise
- Effective on plastic and metal pipes
- Option of combining leakage monitoring with meter reading
- Upgradeable with the optional Accelerometer
- A range of accessories to adapt to conditions in the field

Where should it be installed?

- Tight spaces
- Metering environment
- Indoor networks and installations
- Public-sector network

Equipment



Designation

- 1** AQUA M60 device
- 2** Bluetooth headphones
- 3** Listening extension sticks
- 4** AQUA M60 accelerometer for locating
- 5** **Accessories:** tripod, mounting magnet
- 6** Carrying case





Other FAST pre-locating devices

The AQUA M100, AQUA M300 and LOKAL 400 acoustic devices are multi-purpose devices that, in addition to locating and/or correlating leaks, can also be used to pre-locate leaks.



AQUA M100



AQUA M300



LOKAL 400

Advantages

Robust equipment adapted to conditions in the field

Simple and intuitive to use

Top-of-the-range peripherals

Upgradeable products

Where should they be installed?

- On network listening points: valves, service connections, and on the ground

Equipment

1



2



3



Designation

1

AQUA M100 device for acoustic pre-locating and locating leaks, for pipe detection with PWG (see p.52)

2

AQUA M300 device for acoustic pre-locating and locating leaks, upgradeable to tracer gas, for pipe detection with PWG (see p.54)

3

LOKAL 400 device: Correlator upgradeable to acoustic pre-locating and locating of leaks, and pipe detection functions with PWG (see p.50)





Multi-purpose correlator LOKAL 400

The LOKAL 400 is a multi-purpose device to pre-locate, correlate and pinpoint leaks.

This solution is easy to transport, simple to use, optimises the response and enables the leak to be quickly located.



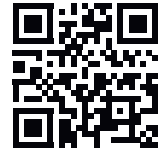
Advantages

- A 2-in-1 system: correlator and upgrading to ground listening
- High-contrast, backlit colour display for ease of use
- Highly ergonomic with multifunction rotary knob and touch screen
- Upgradeable to ground listening and acoustic pipe tracing functions
- Easy to use: automatic or expert mode
- Accurate, multi-point correlation
- Correlation storage and the option of updating parameters to recalculate a correlation at a later date and print a report
- “Trans-auto” function to cope with road traffic
- Effective on plastic materials thanks to the hydrophone version

Where should it be installed?

- On pre-located listening points: valves, service connections, and on the ground

Equipment



Designation

- 1** LOKAL 400 correlator
- 2** Headphones
- 3** Hydrophone kit for plastic pipes
- 4** SENSE hydrophone connector to connect to SENSE hydrophone
- 5** Listening stick with extensions (ground listening peripheral)
- 6** MB6 radio beacons blue/red/yellow for correlation. Advanced radio beacons, including ground listening functions and frequency filters that can be adjusted to suit the pipe material
- 7** Accelerometer for MB6 radio beacon
- 8** Listening cup for locating leaks
- 9** Carrying case





AQUA M100 leak detection device

The AQUA M100 is an acoustic detector to pre-locate and pinpoint leaks.

It provides acoustic leak detection and pipe locating when coupled with the PWG II pulse generator. It is robust and easy to carry, and is the essential solution for high-quality acoustic detection.



Advantages

- Pre-locating: acoustic leak locating and pipe detection
- Top-of-the-range peripherals
- Compact, rugged and easy to transport device
- Professional sound quality with 6 pre-set filter levels
- Amplifies leakage noise while reducing parasitic noise
- Easy to use: just 3 setting buttons (volume, gain and frequency range)
- Saves noise intensity data to locate leaks
- Double digital and graphic display of the values
- Pipe detection with PWG pulse wave generator (not supplied)

Where should it be installed?

- On network listening points: valves, service connections, and on the ground

Equipment



Designation

- 1** AQUA M100 device
- 2** Top-of-the-range Peltor headphones
- 3** Listening stick with extensions for pre-locating leaks
- 4** Universal accelerometers: with or without handle and tripods
- 5** Listening cup for locating leaks
- 6** Carrying case





AQUA M300 universal leak detection device

The AQUA M300 is a universal system to accurately pre-locate and pinpoint leaks.

It provides acoustic leak detection, tracer gas leak detection and pipe locating when coupled with the PWG II pulse generator.

This intelligent 3-in-1 solution offers simplified and reliable guidance to the leak.



Advantages

Upgradeable and multi-purpose: ground listening + tracer gas detection + detection and tracing of pipes made of all types of materials using the PWG pulse generator

High-contrast backlit colour touch screen

Highly ergonomic thanks to its touch screen and multifunction rotary knob for menu selection and confirmation

Suitable for all users: automatic or expert modes

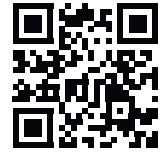
Sound recording and possibility of report editing

Up to 40 hours of battery duration

Where should it be installed?

- On network listening points: valves, service connections, and on the ground

Equipment



Designation

- 1** AQUA M300 device
- 2** Top-of-the-range Peltor headphones
- 3** Listening stick with extensions for pre-locating leaks
- 4** Universal accelerometers: with or without handle and tripod
- 5** Listening cup for locating: top-of-the-range listening cup that limits the effect of ambient noise
- 6** Large H2 tracer gas detection probe for locating leaks
- 7** Flexible H2 tracer gas detection probe for locating leaks
- 8** Carrying case





Ultra-high precision leak pinpointing device PIPEMIC FLEX

The PIPEMIC FLEX is a device for pinpointing leaks and identifying pipes under pressure.

It is easy to use, efficient and very accurate on plastic pipes, and optimises excavation costs. With its hose piece, the PIPEMIC FLEX is suitable for leak detection in meter environments with sharply curved pipes.



Advantages

The most flexible PipeMic, suitable for the toughest conditions

3-in-1 system: acoustic leakage detection, pipe tracing and locating of the leakage point

Effective on all types of PE / PVC / Metal pipes

Quick and easy to use by inserting the probe (Ø 10 mm)

Listening over a length of 50 m

Listen directly to leakage noise on a Bluetooth device

Built-in odometer

Built-in disinfection system

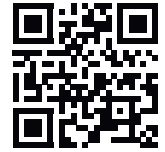
Several leaks can be identified in a single operation

Reduced earthwork and repair costs

Where should it be installed?

- By inserting the probe into a network access point: meter, manhole
- On a pipe

Equipment



Designation

- 1** **PIPEMIC FLEX device:**
line length 50 m
- 2** **Bluetooth loudspeaker**
- 3** **Bluetooth headphones**
- 4** **Accessory case**
comprising a flexible tip, disinfectant, fire department quick coupling, charging accessories and 9V battery
- 5** **Banana plugs** to connect a pipe detector
- 6** **Insertion rod** for vertical connection





Ultra-high precision leak pinpointing device PIPEMIC M/L

The PIPEMIC M is a device for pinpointing leaks and identifying pipes under pressure.

It is easy to use, efficient and very accurate on plastic pipes, and optimises excavation costs.

The PIPEMIC M is ideal for leak detection in individual connections and small distribution pipes (Version M up to 50 m cable length, Version L up to 80 m cable length).



Advantages

The best all-rounder PipeMic

3-in-1 system: acoustic leakage detection, pipe tracing and locating of the leakage point

Effective on all types of PE / PVC / Metal pipes

Quick and easy to use by inserting the probe (Ø 12 mm)

Listening over a length of 50 m (PipeMic M) or 80 m (PipeMic L) for pipes DN 20 to 150

Listen directly to leakage noise on a Bluetooth device

Built-in odometer

Built-in disinfection system

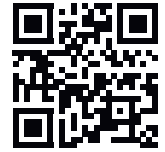
Several leaks can be identified in a single operation

Reduced earthwork and repair costs

Where should it be installed?

- By inserting the probe into a network access point: meter, manhole
- On a pipe

Equipment



Designation

- 1** **PIPEMIC M/L device:**
line length 50 or 80 m
- 2** **Bluetooth loudspeaker**
- 3** **Bluetooth headphones**
- 4** **Accessory case**
comprising a flexible tip, disinfectant, fire department quick coupling, charging accessories and 9V battery
- 5** **Banana plugs** to connect a pipe detector
- 6** **Insertion rod** for vertical connection from Ø 100





Ultra-high precision leak pinpointing devices PIPEMIC XL / XXL

PIPEMIC XL/XXL are devices for pinpointing leaks and identifying pipes under pressure.

They are easy to use, efficient and very accurate on plastic pipes, and optimise excavation costs. The XL and XXL models are suitable for leak detection over longer distances in large pipes (XL version up to 150 m cable length, XXL version up to 300 m cable length).



Advantages

- Long-distance solution and for large diameters
- 3-in-1 system: acoustic leakage detection, pipe tracing and locating of the leakage point
- Effective on all types of PE / PVC / Metal pipes
- Quick and easy to use by inserting the probe (Ø 22 mm)
- Listening over a length of 150 m (PipeMic XL) or 300 m (PipeMic XXL) for pipes DN 75 to 300
- Listen directly to leakage noise on a Bluetooth device
- Built-in odometer
- Built-in disinfection system
- Several leaks can be identified in a single operation
- Reduced earthwork and repair costs

Where should it be installed?

- By inserting the probe into a network access point: valve, meter, manhole
- On a pipe

Equipment



Designation

- 1** **PIPEMIC XL/XXL device:**
line length 150 m or 300 m
- 2** **Bluetooth loudspeaker**
- 3** **Bluetooth headphones**
- 4** **Accessory case**
comprising a flexible tip, disinfectant, fire department quick coupling, charging accessories and 9V battery
- 5** **Banana plugs** to connect a pipe detector
- 6** **Insertion rod** for vertical connection



Conserving resources

A wide range of equipment can be positioned at various points in water networks to monitor them. This often communicating equipment, which is installed temporarily or permanently, measures parameters and collects data to provide information on the state of the network and to provide an alert in the event of an anomaly.

Supervision solutions (platform, application, software, etc.) can

be used to monitor equipment globally and remotely for relevant analysis and suitable monitoring.

The monitoring tools are a decision-making aid for operators in their management of the water network: prioritisation of actions and work. They improve response in the event of an anomaly.

Ijinus, Fast and Wayve offer industry-specific tools to monitor your equipment remotely and to respond quickly.

Supervision includes platforms, software and applications that collect the data transmitted by communicating equipment installed in the field, with the aim of carrying out a global remote analysis.





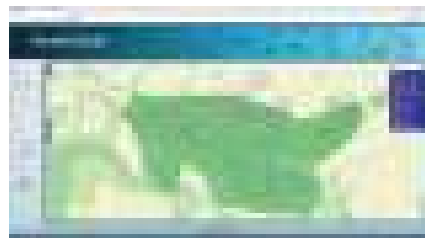
IJINUS

A platform to view and analyse sensor data from sensors, IJITRACK, see p.66



FAST

A platform that provides remote monitoring of the data logger population, WATERCLOUD, see p.72



WAYVE

An application and a platform to remotely control and monitor the network of connected boxes, WAYVE, see p.74





AVELOUR

configuration software

Configuration and data collection

AVELOUR is the IJINUS software to configure your sensors, data loggers, detectors and hubs. It can also be used to collect and analyse data and export the data to Excel files or reports.

Configuration via AVELOUR does not require any manual activation. It guarantees the safety of your employees and saves them time.

Multiple configuration options are available: measured data, frequency, sensor name, GPS coordinates, etc. Sensor settings and data collection can be carried out locally by radio or remotely via a data logger.

For remote collection, alerts can be configured on your monitoring tool.



Advantages

Intuitive interface

Unique configuration tool, compatible with all IJINUS sensors

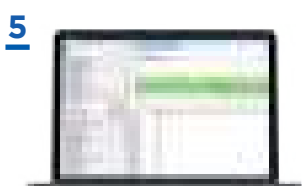
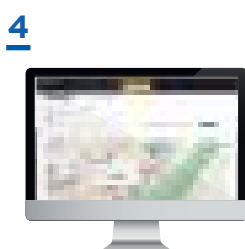
Fast assisted configuration

Settings are saved so that they can be duplicated for several sensors

Summary display of your data in graph form, with the option of comparing data from several devices

Remote configuration and supervision means security is guaranteed

Additional products



Designation

- 1 **LOG BLUE:** Sensors, data loggers
- 2 **WIJI connection kit** including a radio transmitter, USB cable, antenna or USB stick (see p.88)
- 3 **WIJI app** to quickly set up your IJITRACK account (see p.68)
- 4 **IJITRACK** web platform to collect and analyse data (see p.66)
- 5 **PC or tablet:** Minimum version Windows 7

Technical characteristics

- ___ **Data export:** GIF, JPEG, Excel and CSV format
- ___ **Update:** availability notified at each connection
- ___ **Required operating system:** Windows 7 or later





IJITRACK web platform

Data display and management

IJITRACK is a web-based platform where your sensor data is compiled and displayed to be analysed and interpreted. It can be used to set up e-mail or SMS alerts, and to export measurements in .csv, Excel or graph format.

In this way, you can customise how your network is monitored, thereby improving the relevance of your field operations.

You can use the platform to view the location of your sensors on a map and quickly interpret their measurements by displaying graphs with multiple curves.

It is also easy to create and manage customer accounts or groups, by assigning different levels of rights to them.



Advantages

Unique supervision tool, compatible with all IJINUS sensors

Fast assisted configuration

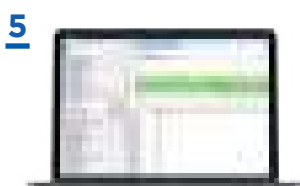
Customised monitoring of your data with tailor-made exports (Excel or graph format, by sensor, by group, from one date to another, can be automated by http request)

Fast response in the field with customised alerts

Increased operator safety through remote supervision

Data security through a secure HTTPS connection and 128-bit encryption

Additional products



Designation

- 1** **LOG BLUE:** Sensors, data loggers
- 2** **WIJI connection kit** including a radio transmitter, USB cable, antenna or USB stick (see p.88)
- 3** **WIJI app** to quickly set up your IJITRACK account (see p.68)
- 4** **AVELOUR software** to swiftly program sensors and to retrieve, analyse and export data (see p.64)
- 5** **PC or tablet** with Internet access

Technical characteristics

- ___ **Data export:** GIF, JPEG, Excel, .csv format - can be automated by HTTP request
- ___ **Data import:** by SMS, GPRS (FTP), LTE-M, NB-IoT
- ___ **Multiple-curve display:** up to 7 curves
- ___ **Alert recipients:** up to 20 numbers or e-mail addresses





WIJI App

Mobile configuration application

The WIJI app will help you to get your IJITRACK account set up quickly. It is available on Google Play and on the App Store and provides real-time notifications and alerts to optimally monitor critical points in the network.

The app also displays the latest data sent by the sensor, as well as photos taken during installation, etc.



Advantages

Time saved by scanning the QR code on the data logger/recorder to activate automatic GPS positioning

Fast response in the field with customised notifications and photos of the installation to make it easy to locate the sensor

Remote configuration and supervision means security is guaranteed



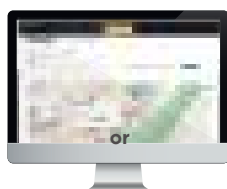
Additional products



1



2



3



4



5



Designation

- 1 **LOG BLUE:** Sensors, data loggers
- 2 **IJITRACK** web platform to display and process data, set alerts, etc. (see p.66)
- 3 **WIJI connection kit** including a radio transmitter, USB cable, antenna or USB stick (see p.88)
- 4 **AVELOUR software** to swiftly program sensors and to retrieve, analyse and export data (see p.64)
- 5 **Smartphone** running iOS or Android

Technical characteristics

- ___ **Free**
- ___ **Compatibility:** Android and iOS
- ___ **Languages:** French and English
- ___ **Memory required:** 25 MB



Equipped vehicle

WATER TEST VAN

The WATER TEST VAN is a vehicle equipped for leak detection.

Its custom-designed layout optimises routine patrols and response actions.

It is the operational solution for monitoring and carrying out work on water networks.



Advantages

High-quality, customised layout (customised interior design for all types of vehicles by means of flexible aluminium extrusion construction)

Direct access to all the equipment for an efficient response trip

Vehicle designed for emergency interventions

Possibility of incorporating any type of water distribution technology

Examples of equipment



Collaborative planning and design with the client

Assembly and installation by experienced FAST personnel

Use

- ___ Fast on-site intervention
- ___ Choice of measuring and leak detection equipment to suit the situation
- ___ Monitoring and data analysis from the vehicle

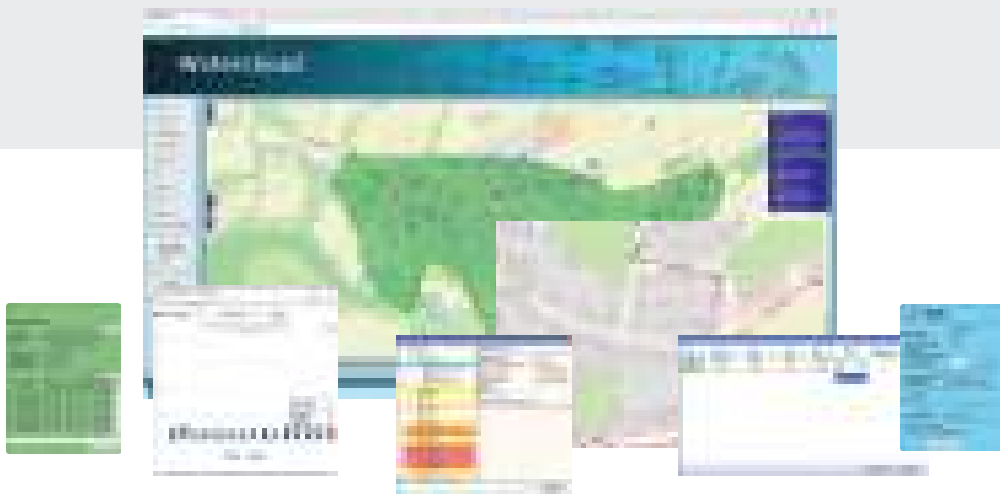




Monitoring platform WATERCLOUD

WATERCLOUD is a web-based platform for remote water supply network monitoring.

Based on a map, it centralises, manages and displays data and measurement values from pre-locators to detect leaks in water networks. This Watercloud online application, which analyses and manages data, improves response times and optimises operating costs.



Advantages

Remote supervision of the water supply network (pre-locator population)

Save, display and manage measurement data from your data loggers and sensors.

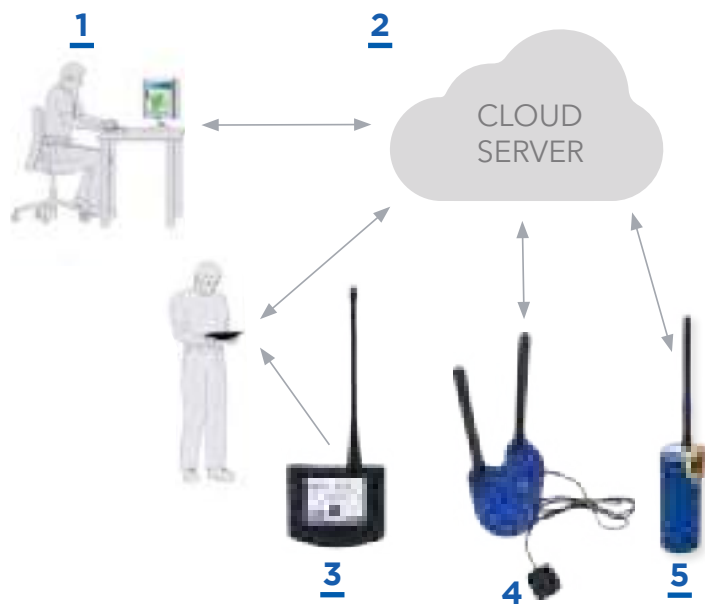
Permanent network monitoring for early detection of water leaks.

Measurement data displayed on map by sector, table, graph. Audio recordings from noise loggers are also available.

Automatic transfer of the measured values from the tablet

Creation of a database (history of the network, measured values and interventions)

Equipment



Designation

- 1 WATERCLOUD platform**
- 2 AZA-OAD tablet and smartphone application:** to import measured values from the tablet
- 3 Service Master:** Interface between radio pre-locator and Bluetooth on tablet or smartphone
- 4 Smartbridge:** Interface between the radio pre-locator and the platform via GSM
- 5 BIDI LoRa logger:** transfer measured data via LoRaWan

Use

- ___ Information retrieval via Bluetooth (via tablet) or GSM (via Smartbridge, BIDI LoRa pre-locator)
- ___ Watercloud account created by FAST
- ___ Login with ID and password
- ___ Option of creating different user levels (administrator, guest, etc.)
- ___ Geolocating of equipment (loggers) on WATERCLOUD
- ___ All measurement data can be accessed on a map or in a database with a single click
- ___ Data interpretation on WATERCLOUD
- ___ Patrol or response campaigns can be created



Application and platform WAYVE

The WAYVE application and platform are professional tools for monitoring and controlling the water network remotely, via smart boxes.

The WAYVE application (IOS and Android) can be used to program and control the smart box, gain access to the log of its history and statistics and geolocate it.

The WAYVE platform centralises the transferred data. It provides remote monitoring of all the equipment: geolocation, viewing of history and statistics, notifications and alerts, and remote control.



Advantages

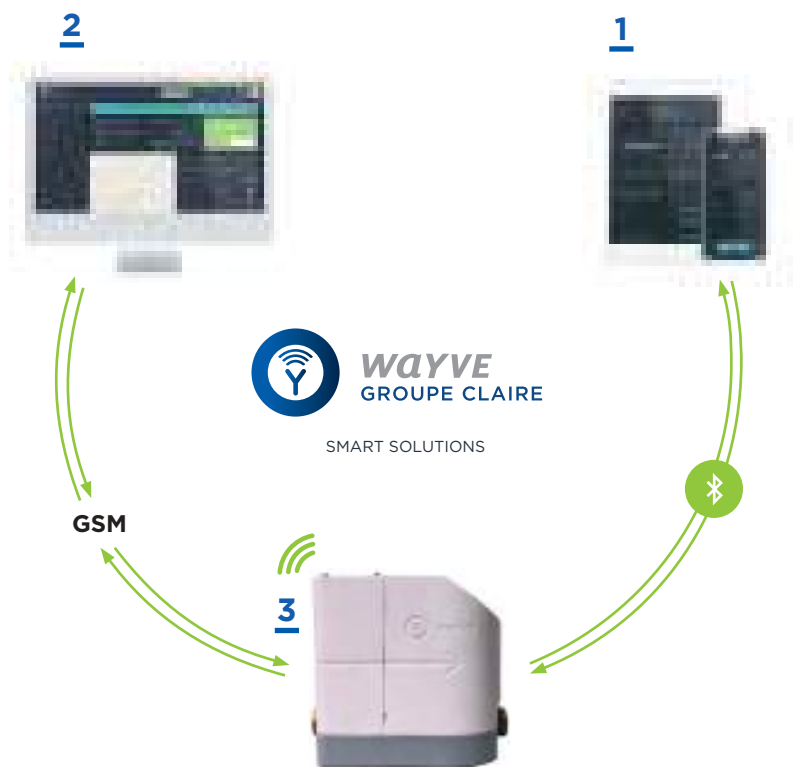
With the application:

- Programming of opening ranges, automatic flushing operations, openings based on a temperature threshold depending on the smart box models that are connected
- System control and automatic action in the event of a leak

With the platform:

- Continuous monitoring of equipment
- Notifications and alerts (leak alert, etc.)
- Remote control (open, close, limited flow, activation of programs)

Equipment



Designation

- 1** **Mobile application** to program and control the smart box
- 2** **Web platform** to monitor and remotely control all the equipment
- 3** **Wayve smart box:** patented and controlled 3-position system (open, closed and limited flow)

Use

- ___ Management of smart valves
- ___ History and statistics
- ___ Data export
- ___ Notifications and alerts
- ___ Remote control of valves
- ___ Locating of equipment
- ___ Battery level
- ___ Meter reading
- ___ Management of users

Conserving resources

Improving the performance of drinking water networks also means having systems that can operate independently and that can be remotely controlled to take swift action.

These systems minimise operating costs by reducing the need to travel, optimise water consumption, limit the risk of leakage and associated damage, and preserve water quality. These smart and controlled solutions are designed for a

range of applications and can be installed in public places (schools, stadiums, parks, cemeteries, etc.), factories, isolated premises, individual houses, as well as on the main network: water network branch, network with low water flow, unburied network.

Wayve supplies **smart boxes** for **automated and customised management of water supply networks.**





Control encompasses programmable and remotely operable connected systems to manage water supply networks.

SAVE

A turnkey solution to save water, the **SAVE box**, see p.78



CLEAN

A system that automatically manages network flushing, the **CLEAN box**, see p.82



TEMP

The **box that protects water and pipes from freezing and high temperatures**, **TEMP**, see p.84





SAVE smart box

WAYVE smart boxes provide automated and customised management of water supply networks.

The SAVE box is ideal for managing access to water in public places and private locations with seasonal occupancy, as well as for problems such as untimely opening, excessive consumption, or sudden surges in demand

It is the turnkey solution to control consumption and save water. It limits the risk of leaks and associated damage, as well as water theft. Trips are optimised.

Connected mode enables all the equipment to be managed remotely: valve monitoring and control.



Advantages

- Consumption is controlled
- Limited risk of leakage and associated damage
- Limited water theft
- Need to travel is minimised
- Remote control
- Automatic self-contained system

Where should it be installed?

- Factories
- Public buildings and places (schools, gymnasiums, stadiums, restrooms, parks and cemeteries, etc.)
- Main network
- Private house
- Camp-sites and ports

Equipment



Designation

- 1** **SAVE box:** patented and controlled 3-position valve (open, closed and limited flow)
- 2** **Mobile application:** programming of opening times, automatic action in case of leakage, system control, history and statistics, box geolocation (see p.74)
- 3** **Web platform:** data transfer, remote control, monitoring of the entire installation, notifications, leak alerts, history and statistics, equipment geolocation (see p.74)

Use

- ___ Conventional connection to the water supply network
- ___ Quickstart
- ___ Access to the application and web platform
- ___ GSM network connectivity
- ___ 2 years of battery life with automatic maintenance (interchangeable battery)
- ___ Support, after-sales service and assistance
- ___ Service life: 10 years (daily usage)



MOVE smart box

WAYVE smart boxes provide automated and customised management of water supply networks.

The MOVE box is ideal for managing access to water in public places and isolated locations, as well as for problems such as untimely opening, excessive consumption, or sudden surges in demand.

This is the turnkey solution to activate water upon presence. It is equipped with a motion detector that activates the water supply when presence is detected, thus limiting the risk of leakage and the associated damage, while reducing the need to travel.

Connected mode enables all the equipment to be managed remotely: valve monitoring and control.



Advantages

Water supply activated only when presence is detected

Limited risk of leakage and associated damage

Need to travel is minimised

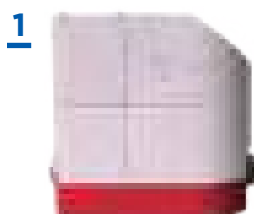
Remote control

Automatic and independent system

Where should it be installed?

- Factories
- Public places (stadiums, gymnasiums, restrooms, etc.)
- Isolated locations
- Private house

Equipment



Designation

- 1 MOVE box:** patented and controlled 3-position valve (open, closed and limited flow)
- 2 Mobile application:** programming of opening times and water opening if movement is detected, system control, history and statistics, box geolocation (see p.74)
- 3 Web platform:** data transfer, remote control, monitoring of the entire installation, notifications, leak alerts, history and statistics, equipment geolocation (see p.74)

Use

- ___ Conventional connection to the water supply network
- ___ Quickstart
- ___ Access to the application and web platform
- ___ GSM network connectivity
- ___ 2 years of battery life with automatic maintenance (interchangeable battery)
- ___ Support, after-sales service and assistance
- ___ Service life: 10 years (daily usage)



CLEAN smart box

WAYVE smart boxes provide automated and customised management of water supply networks.

The CLEAN box is ideal for networks with non-compliant VCM levels, stagnant water or low circulation problems.

It is the turnkey solution to automatically replenish water in controlled conditions.

Water quality is preserved while reducing the need to travel to the field, thus reducing operating costs. Connected mode enables all the equipment to be managed remotely: valve monitoring and control.



Advantages

- Water is automatically replenished
- Water quality is preserved
- Need to travel is optimised
- Lower operating costs
- Remote control
- Automatic self-contained system

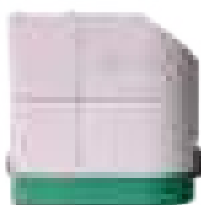
Where should it be installed?

- Water network branches
- Main PVC network, with low water flow
- Closed circuits

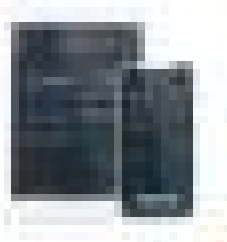
Equipment



1



2



3



Designation

- 1 **CLEAN box:** patented and controlled 3-position valve (open, closed and limited flow)
- 2 **Mobile application:** programming of automatic flushing operations, system control, history and statistics, box geolocation (see p.74)
- 3 **Web platform:** data transfer, remote control, monitoring of the entire installation, notifications, history and statistics, equipment geolocation (see p.74)

Use

- ___ Conventional connection to the water supply network
- ___ Quickstart
- ___ Access to the application and web platform
- ___ GSM network connectivity
- ___ 2 years of battery life with automatic maintenance (interchangeable battery)
- ___ Support, after-sales service and assistance
- ___ Service life: 10 years (daily usage)



TEMP smart box

WAYVE smart boxes provide automated and customised management of water supply networks.

The TEMP box is ideal for unburied networks, and pipes that are exposed to frost and high temperatures.

It is the turnkey solution to protect water and networks from extreme temperatures (water quality and pipe bursts). It generates a regular, controlled and automatic flow of water, programmed in accordance with temperature thresholds. Field trips are optimised and operating costs are reduced. Connected mode enables all the equipment to be managed remotely: valve monitoring and control.



Advantages

- Pipes are protected
- Water quality is preserved
- Need to travel is optimised
- Lower operating costs
- Remote control
- Automatic self-contained system

Where should it be installed?

- Main network (protruding pipes)
- Above-ground networks

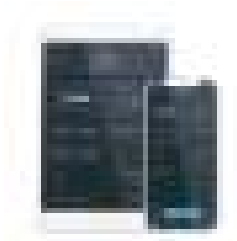
Equipment



1



2



3



Designation

- 1 **TEMP box:** patented and controlled 3-position valve (open, closed and limited flow)
- 2 **Mobile application:** programming of automatic openings based on a temperature threshold, system control, history and statistics, box geolocation (see p.74)
- 3 **Web platform:** data transfer, remote control, monitoring of the entire installation, notifications, history and statistics, equipment geolocation (see p.74)

Use

- ___ Conventional connection to the water supply network
- ___ Quickstart
- ___ Access to the application and web platform
- ___ GSM network connectivity
- ___ 2 years of battery life with automatic maintenance (interchangeable battery)
- ___ Support, after-sales service and assistance
- ___ Service life: 10 years (daily usage)

Conserving resources

To make the most of operating and using the Ijinus range of drinking water diagnostic products, a number of accessories are available.

Some compile data from several sensors (displays), others improve connectivity in underground and difficult environments (antennas) or transfer data (hubs). There are

also connection kits to export data, along with other equipment such as the power pack.

Ijinus supplies a range of accessories for diagnostics.



Diagnostic accessories are complementary parts to Ijinus sensors and data loggers.

CONNECTION

WIJI connection kit, see p.88



POWER

High capacity power pack, see p.90



MOUNTING

LOG BLUE mounting bracket, see p.94





WIJI connection kit

The WIJI connection kit is a small device that can be used to connect to the various IJINUS devices, to set them up and then to collect, display and export data from the IJITRACK platform.

It consists of a pedestrian hands-free kit with antenna and a USB stick to connect to your PC or tablet to transmit the data by radio between the sensors or data loggers and IJITRACK. Its pocket size makes it easy to carry with you wherever you go in the field.

Depending on signal quality, the USB stick alone may be all that is needed to connect to the sensors and data loggers in the field.

In some cases, the antenna is required to amplify the signal.



Advantages

Easy-to-carry compact format

Intuitive interface that recognises nearby sensors

Quick, assisted setup, with summary

Fast and easy access to equipment measurement and diagnostic data

Increased operator safety through remote configuration of sensors and data loggers

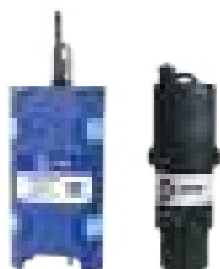
Additional products



1



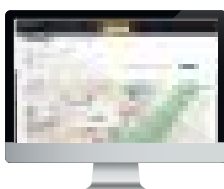
2



3



4



Technical characteristics

- **Connection:** Instant HF
- **Communications:** radio
- **Required operating system:** Windows 7 on PC or tablet
- **Compatible software:** AVELOUR and the IJITRACK platform or any other industry tool
- **Pedestrian hands-free kit dimensions:** 60 x 90 x 31.20 mm (excluding antenna)
- **Pedestrian hands-free kit weight:** 115 g



Designation

- 1 **IJINUS sensors**, to take measurements on the drinking water supply network
- 2 **LOG BLUE and LNU data loggers**, to concentrate the data from the sensors located within their radio field and send the data to the supervision tools (see p.18)
- 3 **AVELOUR software** to swiftly program sensors and to retrieve, analyse and export data (see p.64)
- 4 **IJITRACK** web platform to display and process data, set alerts, etc. (see p.66)



High capacity power pack

The high-capacity power pack consists of 9 long-life lithium batteries to extend the battery life of IJINUS sensors.

Sensor power management can be configured using a LOG BLUE data logger.



Advantages

Ultra-long battery life

Sealed (IP68)

Fast installation with mounting tabs

Additional products

1



2



Designation

1

CPA absolute pressure sensor, for pressure measurements in the drinking water supply network

2

LOG BLUE data loggers, to configure sensors and their power management, and to collect and transmit data (see p.18)

Technical characteristics

___ **Connector:** 5-pin M12 for the CPA absolute pressure sensor and 8-pin M12 for LOG04 data logger

___ **Dimensions:** 269 x 154 x 80 mm

___ **Weight:** 2,593 g

___ **Seal:** IP68



Outdoor GSM antenna

The outdoor cellular antenna facilitates data transmission between sensors, data loggers, and monitoring tools, especially in underground environments or in manholes, where the device's antenna is insufficient.

It can easily be used in combination with underground sensors and data loggers thanks to its robust seal and long cable.



Advantages

Insertion antenna requiring little installation work
Optimised signal quality, even in harsh environments
Seal: IP68

Where should it be installed?

- Manholes
- Underground networks

Additional products

1



2



Designation

1

IJINUS sensor, to take measurements on the drinking water supply network

2

LOG BLUE data loggers, to record measurements for which the signal will be amplified (see p.18)

Technical characteristics

- ___ **Length:** 2 m as standard, other lengths available on request
- ___ **Frequencies:** GSM 900 (890-960 MHz) / GSM 1800 (1710-1880 MHz)
- ___ **Seal:** IP68
- ___ **Diameter:** 45 mm
- ___ **Weight:** 97 g





Mounting bracket for LOG BLUE data logger

The mounting kit for LOG BLUE data logger is designed to make it easy to install in any environment.



Advantages

Easy to install

Where should it be installed?

- Manholes in the drinking water supply network
- Water towers

Additional product



Designation

- 1 **LOG BLUE data loggers,**
to record measurements
(see p. 18)

Technical characteristics

- ___ **Compatibility:** all data loggers from the LOG BLUE range
- ___ **Materials:** stainless steel bracket





Mounting kit (clamp + plate)

for LNU sensor

The mounting kit for the LNU wireless level sensor is designed to make it easy to install in any environment.

The double plate enables it to be installed in a variety of configurations, and it can be folded back to leave enough space for a technician to pass through.



Advantages

Easy to install

Foldable to make it easier for the technician to pass through the manhole

Where should it be installed?

- Manholes in the drinking water supply network
- Water towers

Additional product

1



Designation

1

LNU sensor, to measure and record water levels (see p.26)

Technical characteristics

___ **Compatibility:** all data loggers from the LOG BLUE range

___ **Materials:** stainless steel plate, composite plastic clamp



Touch screen display

**The display can be used to easily view the measurement data recorded in the field.
It is a useful ally to monitor the drinking water supply network.**

The data from the sensors located in the radio field (approx. 100 m) are retrieved by the hub and displayed directly on the screen. It allows 3 values to be displayed per screen up to 20 channels.



Advantages

Extremely easy to use

Automatic or manual page scrolling

Additional products



1



Designation

1

LNU06 wireless level sensor, for ultrasonic height measurements (see p.26)

Technical characteristics

- ___ **Definition:** 128 x 64 pixels
- ___ **Brightness:** 70 cd/m²
- ___ **Display:** Up to 20 channels and 3 values
- ___ **Programming:** By software or using the buttons on the front panel



— Alphanumeric contents

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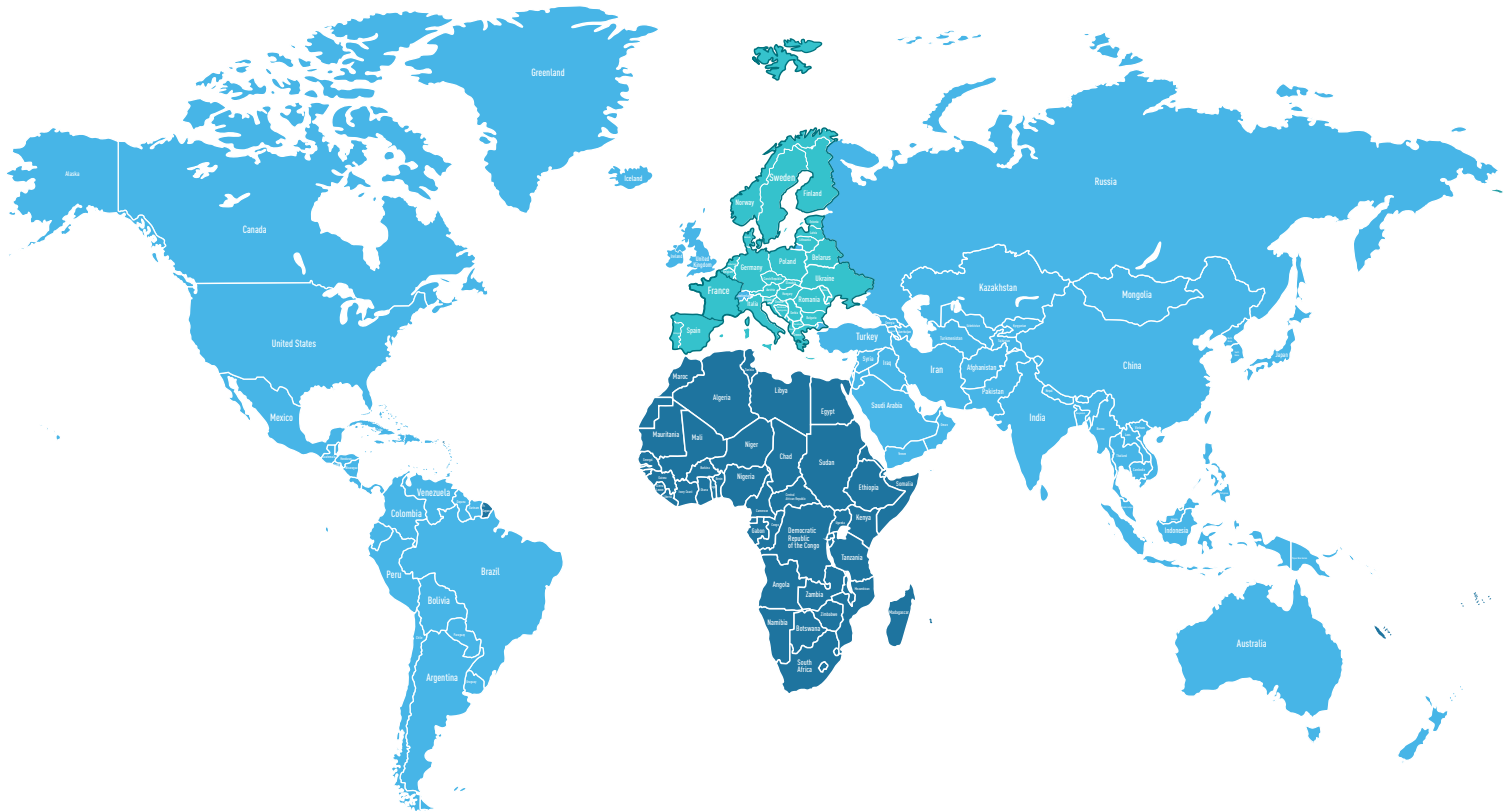
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Drinking water - Sanitation - Natural water



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