



Remote leak pinpointing solutions

Our multi-point correlation systems allow utilities to monitor the water network and locate leaks very accurately from their desktop or laptop. The precise positions of leaks are found thanks to advanced, innovative, time-synchronisation, correlation and data analysis.

ENIGMA3M

Advanced, correlating, noise logger with accurate time-synchronisation for pinpointing leaks remotely. All hardware is safely below ground due to powerful antenna and communications.



ENIGMA3HYQ

Advanced, correlating, noise logger with accurate time-synchronisation for pinpointing leaks remotely in plastic and metal pipes of any diameter.



FEATURES & BENEFITS AT A GLANCE:



Advanced accelerometer sensor

- Pinpoints quiet hard-to-find leaks
- Fewer loggers deployed per km of network



Innovative correlation analytics

- Pinpoints leaks very accurately
- Simple but effective data enables water companies to meet regulatory targets



Modem for remote operation

- Monitor leakage in large networks
- Save manpower and money



Flexible deployment - fixed or semi-permanent

- Save CapEx and OpEx by enabling strategic deployment across large networks



Highly sensitive hydrophone sensor installed inside the pipe

- Can cover the whole network whatever the pipe diameter and material
- Long distance between fittings means fewer loggers deployed, so reducing costs



Innovative correlation analytics

- Pinpoints leaks very accurately in pipes of any material
- Simple but effective data enables water companies to meet regulatory targets



Data sent daily to cloud analytics platform PrimeWeb

- Leaks are found and fixed fast
- Data is readily available anywhere anytime

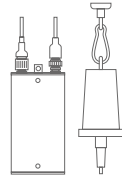


Position of logger located by GPS

- Manage assets with less manpower



LEAK NOISE LOGGERS
& CORRELATORS



ENIGMA3M

A state-of-the-art, accurately-time-synchronised, correlating, noise logger for pinpointing leaks remotely

SENSOR

Type	Integral accelerometer
Sensitivity	30V/g
Frequency range	1 – 2500Hz
Attachment	Integral magnet

SAMPLING

Measurement period	One epoch per night
Resolution	12-bit
Data memory	8MB static RAM

LOCAL COMMUNICATIONS

Type	Infra-red
Range	0.5 metre
Programming	Via Communications Module

3G / 2G COMMUNICATIONS

SIM type	Internal roaming SIM
Transmission frequency (audio+data)	Once per day
Antenna	Penta band

BATTERY

Type	Lithium Thionyl Chloride (non-rechargeable)
Operating life	5 years (dependant upon GSM signal strength and retries)

PHYSICAL

Waterproof rating	Robust aluminium enclosure to IP68 (submersible to 1 metre)
Operating temperature range	-20°C to 70°C
Dimensions (without antenna)	123mm x 58mm diameter
Weight	481 grams

CORRELATION RESULTS

Data storage	WAV files stored in Primayer Cloud
Platform	PrimeWeb operating on an internet browser (Chrome recommended)

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