

# Enigma<sup>®</sup>-Compact

Unique correlation system for leak location

*Enigma<sup>®</sup>-Compact* is a state-of-the-art digital leak noise correlator for accurate location of water leaks in buried pipes. *Enigma-Compact* is a three logger version of the Enigma multi-point correlation system.

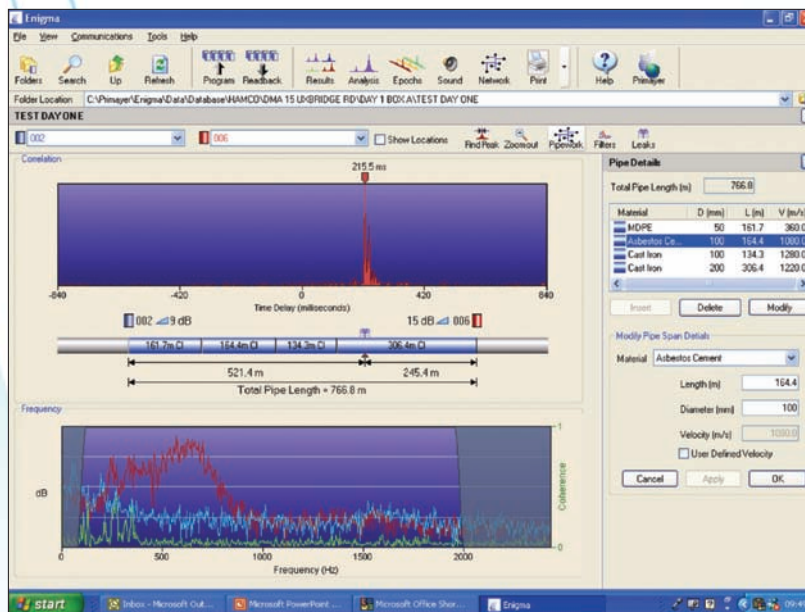
*Enigma-Compact* offers the following:

- High performance 24-bit digital correlation
- Traffic friendly deployment
- Three sensors for accurate results
- Very easy to use
- Compact system
- Low cost

## Operation

Enigma loggers are deployed at multiple positions, typically on valves or hydrants, during normal working hours. They may be programmed for either daytime or night-time operation. The loggers record the actual leak sound. When retrieved the leak sound is transferred to the host software where it is processed to display all leak positions between loggers.

Programming and data readback utilises optical and USB communications to ensure rapid operation.



## Optimum leak sensing

Use overnight provides ideal conditions for leak detection. This is because background acoustic noise from traffic, water usage and other sources, is lowest and, at the same time, water system pressure can be higher which greatly aids leak sound propagation.



## Product features

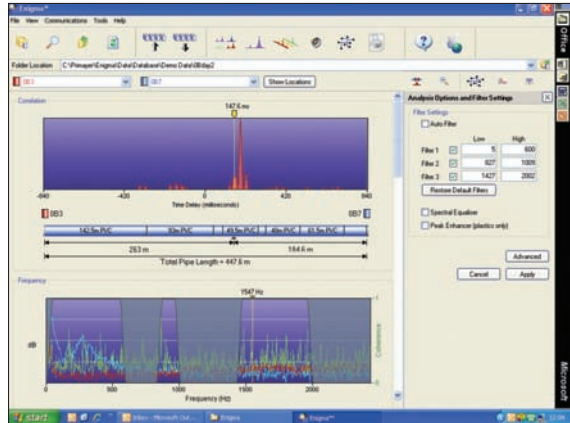
- Three loggers per system
- Loggers programmed/readback via PC or by one button press in the Communications Case
- Fast logger communications
- Loggers powered for 5 years (under defined conditions)
- Loggers submersible to IP68

## Host software features

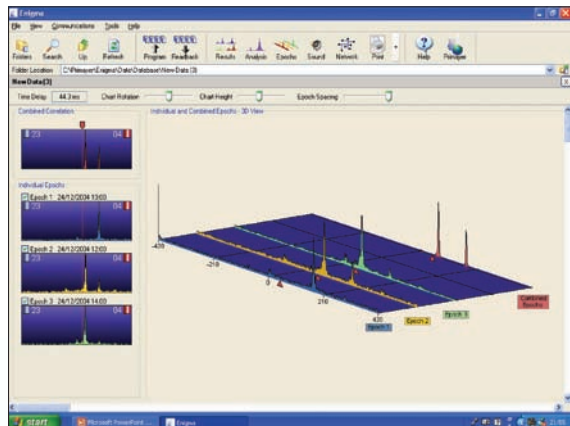
- Advanced correlation, coherence and filtering
- Windows® 'Explorer' style browser
- Logger positions shown on pipe schematic
- Automated velocity measurement

## Separating genuine water usage

Each logger records during three sample periods, typically spaced one hour apart. A characteristic of leak noise is that it is always constant and so if the correlation peak is not present during all three samples then it is due to water use and not leakage.



Multiple filter and auto-filter options



Multiple epochs to determine if leakage or legitimate use of water



Enigma hydrophone version

## Part Numbers

Enigma Compact Kit (3 standard loggers)	<b>JXG 601</b>
Enigma Compact Hydrophone Kit (3 loggers + 3 hydrophones)	<b>JXG 602</b>

## Primayer Limited