Flexible technology for acoustic leak location

*Mikron3* is designed for optimum leak pinpointing and confirmation. The combination of advanced sensors with low-noise processing electronics gives excellent acoustic performance. With its choice of sensors and processors, *Mikron3* is a flexible operational tool.

**Benefits**
- High quality piezo sensors for optimum sound quality
- Sensor gain control for quiet leaks
- Wireless sensor communications for reduced airborne noise pick-up
- Dynamic listen control
- Listening rod and ground microphone sensors
- Choice of three processors;
  - Mini
  - Pro
  - PrimeTouch App
- In-case battery charging

**Acoustic leak location principle**
Water escaping from pressurised pipes generates a noise which is propagated through the water and pipe material. This noise can be detected at available fittings such as valves and hydrants. The noise also travels directly from the leak through the ground to the surface where it is detected by the ground microphone.

**Leak pre-location**
The Listening Rod is placed upon available pipe fittings such as valves or hydrants. Comparison of the noise levels indicates which section of pipe includes the leak. The Listening Rod has an ergonomic design that is balanced and comfortable to hold. It also has LED lights to help find fittings in deep chambers.

**Pinpointing/confirming the leak position**
The high sensitivity ground microphone is for use on flat surfaces above the suspected leak position. The rubber cushioned housing is decoupled from the advanced piezo sensing element providing excellent isolation from airborne noises. A tripod adaptor can be fitted for use on rough surfaces and softer ground.
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*Mikron3 Processor options for maximum flexibility*

**Mini.** This is a small and simple-to-use device suitable for clipping onto the operator’s belt.

**Pro.** This unit displays the Minimum Noise Level which is the background noise level without transient noises such as road traffic. A bar graph allows the operator to see the position of maximum leak noise. Filters allow for background noise suppression. A sound logging mode displays the noise level whilst valves are closed to isolate potential leaking pipes.

**PrimeTouch App.** The Mikron3 is available as an App on PrimeTouch which optionally also hosts the Eureka3 leak noise correlator. This option provides many technology features including Minimum Noise Level and frequency level display to aid accurate leak location together with an audio recording feature for later analysis. It also has a pipe tracing mode. Further information on this App is available.

**Dynamic Listen Control**

The Dynamic Listen Control continuously monitors the detected noise level. If the noise level changes rapidly, for example due to traffic noise, then the sound to the operator headphones is switched off. When the source of louder noise disappears, the Dynamic Listen Control automatically reconnects sound to the headphones. This control both protects the operators hearing and is an automatic ‘press-to-listen’ feature.

**System components**

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<tr>
<th>Model</th>
<th>Alpha</th>
<th>Gamma</th>
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<tbody>
<tr>
<td>Systems – add Processor from options</td>
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<tr>
<td>Listening Rod + extensions</td>
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<td>Ground Microphone + tripod</td>
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<td>Headphones</td>
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<td>Mains charger + vehicle charge cable</td>
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<td>Transport case</td>
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<tr>
<th>Options</th>
<th>Processor</th>
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**Products**

- Mikron3 Alpha: GXG-792
- Mikron3 Gamma: GXG-793
- Mikron3 Alpha+Gamma: GXG-794
- Mini: GXG-783
- Pro: GXG-784
- PrimeTouch: CXG 950
- Accelerometer: CXG 352