Aqua M-300D

Technical Specifications

Operation modes
- minimal display (bar chart)
- frequency spectrum
- pyramid mode
- long-term measurement
- tracer gas leak detection
- real-time display

Filter
- analog Chebyshev
- 48-dB / octave slope
- 256 freely selectable analog
- and digital filter stages
- automatic function

Gain
- manual: > 6000 times
- automatic: shut-off
- hearing protection

Operation
- buttons / encoders / touch
- active assistance

Display
- daylight readable color display with
- LED backlight
- 480 x 272 pixels

Power supply
- 4 x LR14 1.5 V or rechargeable batteries

Operating time
- > 14 hours

Housing
- aluminium powder coated

Dimensions
- 201 x 160 x 60 mm

Weight
- 1800 g with batteries

Protection
- IP 54

Operating temperature
- operating: -10 C to +55 C
- storage: -20 C to +60 C

Sensors

Acoustic sensor sensitivity
- > 1000 pC/g

Acoustic sensor weight
- universal microphone: approx. 870 g
- ground microphone: approx. 2300 g
- test rod: approx. 1250 g

Acoustic sensor protection
- universal microphone: IP 65
- ground microphone: IP 54
- test rod: IP 54

Acoustic sensor operating
- operating: -5°C to +55°C
- storage: -20°C to +80°C

Gas sensor sensitivity
- 1 ppm H₂

Gas sensor range
- 10 ppm to 50,000 ppm

Gas sensor response time
- 0.5 sec

Gas sensor weight
- hand sensor: approx. 400 g
- ground sensor: approx. 950 g

Gas sensor protection
- hand sensor: IP 65
- ground sensor: IP 54

Gas sensor operating temperature
- operating: -10°C to +55°C
- storage: -20°C to +60°C

Software
- data storage 10 per module

Transport
- ABS plastic hard case

Intelligent Geophone for Leak Detection
- Pyramid mode
- 256 analog and digital filter stages
- Automatic function for filtering and amplification
- Long-term measurement
- Tracer gas leak detection

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Extent of Supply
- Headphone
- Universal ground microphone
- Submission with tip
- Wind protected ground microphone
- Test rod microphone
- Magnetic adapter
- Tripod adapter
- Snap
- Fixing hook
- Fix ground probe
- PC connection cable
- Software
- Transport case
- User manual

*Technical changes reserved.
**Aqua M-300D**

**Acoustic Leak Detection with Geophon**

A clear and concise display supports the leak statement effectively. 256 free and automatic adjustable filter settings achieve effective reduction of noise pollution and best results. Thus the automatic adjustment of amplification and filters the displaying of smallest leaks is certain.

**Tracer Gas Detection**

Even the most advanced filter cannot suppress any interference noise, because this same leak is only partially audible. For this instance the Aqua M-300D is fitted with the ultimate tracer gas technology to locate the leak (5 % Hydrogen 95 % Nitrogen). This decades proven, safe and accepted method by the international Water Wise Associations (DVGW, WWA, AWA etc.) is now available for the first time in this smart combination.

**Tracing Plastic Pipe with PWG**

The localization of plastic pipes is still a major challenge. The Aqua M-300D in combination with the PWG offers as an excellent complement to conventional systems, like ground radar and fiberglass detection probes.

**Artificial intelligence? - No, but a lot of Innovation!**

The pyramid mode determined by means of intelligent algorithms in the background automatically optimizes the leak information and thereby enables an unmatched precision in the positioning of the leak. By using these innovative and unique methods of measurement and ultimate Chebyshev analog filter with 48 dB / octave slope, noise pollution effectively is eliminated.

The integrated data logger function provides the ultimate review of the leak. This is particularly useful in situations with high ambient noise. By recording the sound, till a maximum of one hour and closing the pipeline to check, the leak noise can be safely distinguished from pollution noises.