



iQ100B

**Advanced Mobile Leak
Detection with Innovative
Wireless Acoustic Sensor**

At Aquarius Spectrum, we are committed to innovation and dedicated to reducing water loss.

- ▶ The iQ100B is providing water professionals with a powerful tool that simplifies leak detection and contributes to water conservation efforts.



Your Solution for Effortless Water Leak Detection

Discover the iQ100B, a cutting-edge mobile leak detection device designed to streamline the process of identifying water leakages. Featuring a robust design that accommodates a listening stick and an attachment magnet, the iQ100B offers versatility and simplicity in every survey. Seamlessly connects to the AQS cloud via a user-friendly Android or iOS mobile application on your smartphone or tablet.



Key Features

► Effortless and Easy to Use Operation

The iQ100B is designed for simplicity. Whether using the mobile app or the onboard buttons, you can effortlessly conduct leak surveys.

► Real-Time Data Streaming

Experience real-time data streaming to the AQS cloud and your mobile phone headset. Stay connected and always informed.

► Cross-Platform Compatibility

Compatible with both Android and iOS, the iQ100B ensures accessibility for all users.

► Unmatched Durability

With its robust IP68 enclosure, the iQ100B is built to withstand the harshest conditions, providing reliable performance in any environment.

► Long-lasting Rechargeable Battery

Enjoy up to 5 days of uninterrupted surveys thanks to the powerful rechargeable battery.

► Intuitive LED Indicator

A three color coded daylight RGB LED indicates the device's operational status, keeping you informed and in control.

► Hands-Free Operation

Enjoy hands-free convenience during operation, eliminating the need to hold your mobile phone throughout the survey.

► Seamless Connectivity

No cellular coverage?

No problem. The iQ100B allows surveys without cellular coverage, by utilizing the internal data storage of the connected mobile device. It ensures that no area is beyond the reach of your leak survey efforts.

► Enhanced Sound Accuracy

With significantly improved sound quality and precise device synchronization, the iQ100B ensures unmatched accuracy in leak sound analysis.

The experts' voice:

Using the iQ100B the water network operator can deploy untrained and unskilled technicians to find points of interest, while accurately monitoring resource productivity.

JONATHAN ADLER
Commercial Director Aqualogic, UK

The iQ100B helps in the following: keeping record of acoustic recordings at a certain sampling point; training of new staff as acoustic recordings can be playback and analyzed; allowing field operators and engineers (office-based) to work seamlessly together; Record both raw audio and auto-filtered audio.

KENT XU
General Manager & Leak
Detection Expert, Evergloss Pte Ltd

What's Included

Everything You Need:

Inside the box, you'll find the iQ100B device, an M4 eye bolt, a black lanyard, a USB charging cable, a tripod, and a listening stick with neodymium magnets for versatile use.



Technical Specification

AUDIO / RECORDING PERFORMANCE

Sampling Frequency	8KHz (configurable)
Dynamic Range	24bit
Noise cancelation	Internal EMI suppression
Audio streaming delay	<0.5 seconds

WIRELESS CONNECTION

Connection type	BLE 5.0 (2.4GHz)
Antenna	Internal chip antenna -2dBi
Transmit power	+10dBm

INTERFACE

Control buttons	Power, BLE pairing, Record
Daylight RGB LED	Blue – BLE Green – Power mode On/Off, Charging status RED – Recording
Identification	Unique ID for each device, blink & vibrate on request

POWER CONSUMPTION

Internal battery	Rechargeable Li-Ion 660mAh (IEC62133, UN38.3, UL 1642)
Battery protection circuit	Shortcut, Over-voltage (4.2V), Over-discharge (3.0V)
Operation time between recharge	112 hours
Full cycle recharging	<5 hours
Charging port	Magnetic pogo pin at 5V (using a standard USB type A mobile phone charger)
Rechargeable battery life	>3.5 years, may be replaced on device service
Power management	Auto sleep / Auto shutdown

MISCELLANEOUS

Firmware upgrade	Over BLE
Push buttons durability	Minimum 500K press
Attachment magnet interface	Supplied with 2 magnets: N12 and N19 grade
Operational temperature range	-20°C to +60°C (-4°F to 140°F)
Dimensions	H=125mm, Ø=47mm
Weight	230 gr (0.5 lbs)
Certification	UL94-V0, CE, FCC, IP68

About us

AQS (Aquarius Spectrum) supports water utilities around the world to reduce their water loss through high-performance leak management solutions combined with superior tailor-made Human-as-a-Service offering. AQS technologies empower water utilities to detect and prevent leaks, enabling proactive continuous monitoring and efficient management of water networks, to reduce NRW (Non-revenue-water) and optimize resource allocation.

AQS's field-proven sensors stand out with unparalleled ability to precisely identify hard-to-find leaks, including those as minimal as 20 l/m (5 gpm), even in large diameter pipes of 1500 mm (60 in) and above. This feature strengthens the company unique value proposition as the provider of the market's most sensitive leak detection technology that enables high-precision leak detection and provides the ability to cover larger network areas with fewer sensors.

The AQS-SYS platform is powered by advanced algorithms and big data analytics, offering in-depth network analysis. Furthermore, it is compatible with all pipe materials and sizes and offers continuous customer support. A unique feature is its capability to analyze audio data between Accelerometers (Over and Underground Acoustic Correlating Sensors) and Hydrophones, making it exceptionally useful for mixed material networks.

Aquarius Spectrum is a company of **Aliaxis**
Present in 40+ countries, Aliaxis is a global leader in advanced fluid management solutions that enable access to water and energy.



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