

ECHOLOGICS®

a **MUELLER** brand

EchoShore® - DXe

Leak Monitoring Sensor

Get reliable leak alerts
powered by artificial
intelligence



DETECT



MONITOR



CONTROL



REPAIR

MUELLER

INCREASE YOUR WATER NETWORK'S RESILIENCE

The **EchoShore-DX** system incorporates the latest generation of acoustic sensors, which are the result of Echologics pioneering success with correlating leaks on a variety of pipe materials and diameters. While the EchoShore-DX sensors are built into an aboveground fire hydrant cap, the new EchoShore-DXe sensors connect to virtually any access point, such as in wash out or Valve chambers.

Both DX sensor types use the same advanced algorithms and AI technology to identify and locate the source of acoustical noises generated by leaks with great accuracy, before they become detectable by conventional methods. This early awareness enables utilities to prioritise repairs based on leak severity, minimising operational impact and ensuring the most effective allocation of resources.

| FEATURES | BENEFITS |
|--|---|
| Acoustic Leak Monitoring | Detect, locate, and monitor existing and emerging leaks, including multiple nearby leaks. Monitor leak progression to assist in timely repairs. Post-repair, use the system continues to monitor to verify that repairs were effective. |
| Versatile Design Paired with Rugged Hardware | Attach the magnetic sensor to virtually any part of your water network, such as on valves or in boundary boxes – so that you get coverage where you need it. |
| 10-Year Battery Life | Spend time fixing leaks, not sensors. EchoShore-DXe is designed to last 2-3 x the industry standard. |
| AI Analytics | The EchoShore-DX system is supported by advanced AI analytics, which cuts through noisy data and focuses users on the key leaks that need attention, whilst at the same time minimising false alerts. |
| Dedicated Support and Analysis Team | Assists informed decision making with contextual insights on what's happening in your network through our highly-skilled team of data analysts. |
| Secure, User-Friendly Interface | Get a complete view of your live network and make business-critical decisions, with the Sentryx™ Water Intelligence platform. |

WITH THE ECHOSHORE-DX_e SENSOR FROM ECHOLOGICS

SAVING WATER IN SILICON VALLEY

Situation:

After facing one of the worst droughts in U.S. history, San Jose Water decided their traditional approach to leak detection would no longer suffice. The company turned to Echologics, starting with a pilot, before adopting EchoShore-DX as an integral part of their water loss control program.

- Discovered 121 consumer-side leaks and 108 utility-side leaks in 2021 with their network of 8,200 sensors
- Saved approximately 200 million gallons (757 million litres) of water that same year – equivalent to the energy offset of 6,300 trees

IMPROVING OPERATIONAL EFFICIENCY IN NEW JERSEY

Situation:

New Jersey American Water used to rely on labour-intensive leak detection methods – a process that could take 2-3 years to inspect the entire network. They now use EchoShore-DX nodes – which survey the full network daily – to monitor their network and prioritise repairs.

Results:

- Identified 118 active leaks in first 18 months of operation
- Saved an estimated \$1.9 million USD in operating expenses in the first 2 years of operation
- Identified more than 740 leaks using a system of 12,600 sensors

CITY OF MEDICINE HAT GETS A LEAK-MONITORING UPGRADE

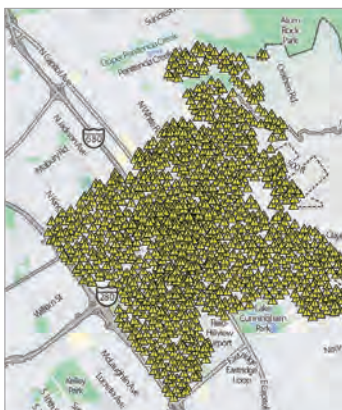
Situation:

Water leaks and failures of aging asbestos cement, cast iron, and ductile iron pipes compelled the city to seek an automated leak detection and monitoring solution that would help cut water loss, and offer the least disruption to residents and businesses.

Results:

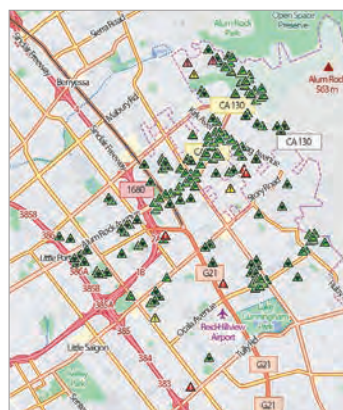
- Installed 309 sensors
- Identified 5 leaks

EchoShore Advanced Analytics & AI Focus Operators on Events that Require Action



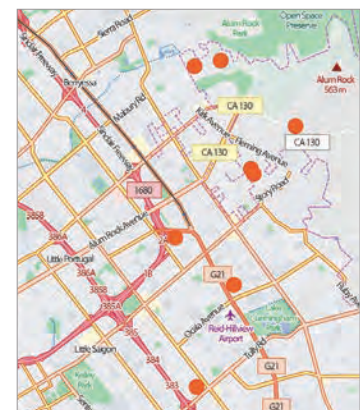
Data

29,297 Network Noises



Information

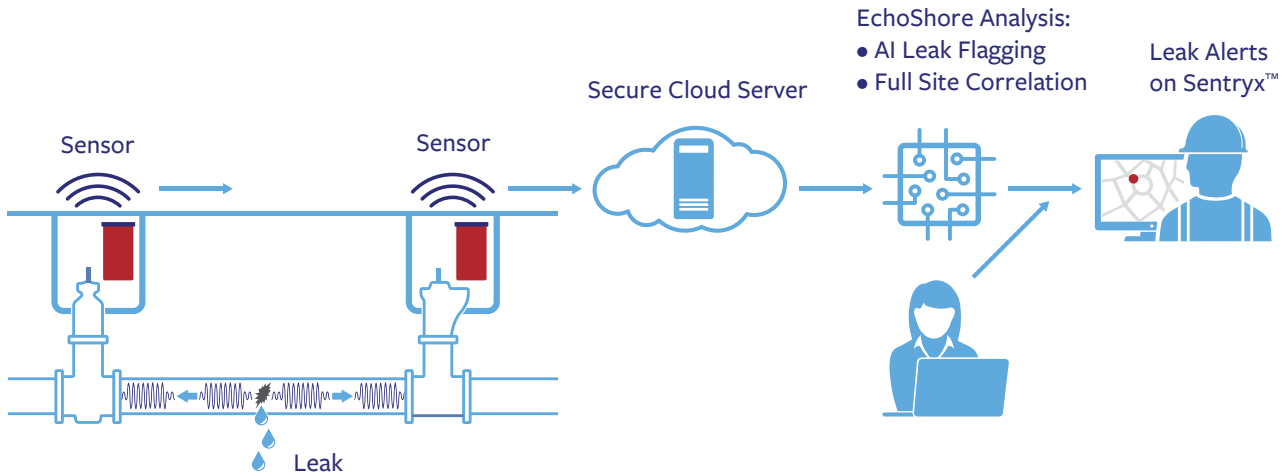
555 Persistent Noises



Insight

8 Investigations Recommended

HOW IT WORKS



PRODUCT SPECIFICATIONS

| General Node | |
|-------------------------------|---|
| Dimensions (without antenna) | 14.35 x 7.86 x 7.62 cm (5.65 x 3.1 x 3 in.) |
| Operating Temperature Range | -20° to 70° C (-4° to 158° F) |
| Weight | 0.65 kg (1.43 lbs.) |
| IP Rating | IP68 |
| Sensor | |
| Type | Accelerometer |
| Sensitivity | 1.4 mV p-p/G pk |
| Sensor Connection | Magnetic |
| Communications | |
| Transmission Frequency | Configurable, typically daily |
| Communications Type Supported | LTE CAT-M1 and NBIoT |
| Battery | |
| Battery Life | 10 years |
| Battery Type | Lithium Metal |
| Antenna | |
| Length | 9.7 cm (3.82 in.) |
| Width | 9.5 cm (3.74 in.) |
| Height | 3.4 cm (1.34 in.) |
| Weight | 0.28 kg (.62 lbs.) |

For more information about us, or to view our full line of products, please visit www.echologics.com or call International Customer Service at: UK: +44.1438.487410 Dubai: +971.4.214.6640 Singapore: +65.6816.3088 USA: +1.800.423.1323 | Email: International@muellerwp.com

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