ECHOLOGICS®

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ECHOSHORE® MOBILE LEAK DETECTION SYSTEM

THE RIGHT DIRECTION TO REDUCE NON-REVENUE WATER

DETECT | MONITOR | CONTROL | REPAIR

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REDUCING LEAKAGE FROM A TRANSMISSION MAIN NETWORK WITH ECHOSHORE®-M IS ACCURATE, COST-EFFECTIVE, AND MOBILE.

THE FLEXIBLE APPROACH IS BASED ON WATER COMPANY NEEDS IN TERMS OF SURVEY LOCATION, LEVEL OF EXPERTISE, CREW AVAILABILITY AND COST OF LABOUR.

The EchoShore®-M system combines the latest generation of acoustic sensors with proven wireless communication networks in a node configuration that can be easily moved to multiple sites in your transmission main network. This innovative thinking is the result of our pioneering success with correlating leaks on a variety of pipe materials and large diameter mains. The EchoShore®-M system enables utilities to quickly pinpoint leaks and significantly reduce water loss.

The system is designed to be lightweight, rugged, and portable, allowing a water company to monitor sections of the transmission main for time periods of just a few hours to several days.

LEVERAGING LOCAL AND GLOBAL EXPERTISE.

Local water company personnel understand their transmission assets best – terrain, working environment, and asset operability. The EchoShore®-M system has been designed to enable local leak detection crews to manage the installation of the monitoring nodes on the transmission main. Crews will quickly learn the operating procedures required for the EchoShore®-M system through standardised training. This approach enables utilities to develop internal expertise and to reduce the cost of transmission main leak detection.

Nodes are configured to automatically send information to a secure server, where experienced leak detection engineers interpret the data. Our leak detection engineers have significant field and acoustic signal processing training in urban and rural environments in both developed and developing countries, and this knowledge will be transferred to the client through on site and remote training and support.

FEATURE	ADVANTAGE	BENEFIT
Flexible monitoring duration	Locate more leaks to achieve NRW targets	Water-loss reduction and cost savings for water company
Acoustic sensors stay outside the transmission main	Easy to deploy with minimal preparation of access points	Operates in a wide range of flow conditions, low-risk operation
Cloud-based analysis	Access to global experts without the cost of travel	Superior leak detection accuracy at a lower cost
Separation of sensor network deployment from data analysis	Use local field crews to manage technology deployment	Rapid NRW programme kick-off and lower programme costs

ECHOSHORE®-M

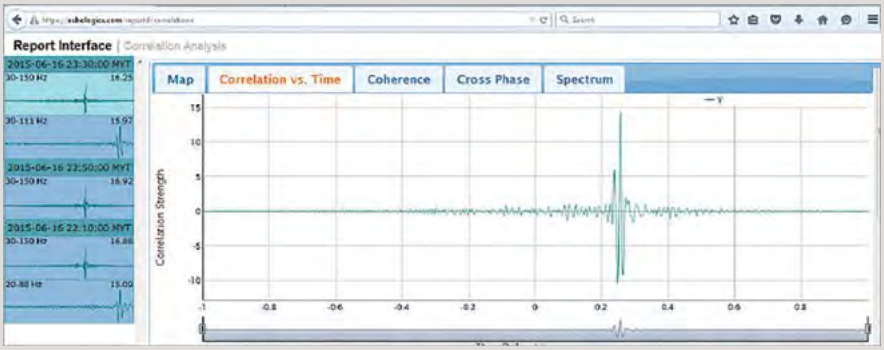
Flexibility, Simplicity, and User-Friendly Options.

HOW THE ECHOSHORE®-M SYSTEM WORKS

A node is fitted into a rugged case and consists of an advanced acoustic sensor, network hardware, battery, antenna, and ancillary parts.

Nodes can be connected to a water main in a chamber, above ground, or other locations where access to the water main can be obtained. Nodes are typically placed 500 to 1,000m apart and can be applied to a variety of pipe materials ranging in diameter from DN300 to DN3000.

Data files are recorded at a user-specified intervals and wirelessly uploaded to the secure server via a cellular network. Automated analysis of the recorded files is performed to remove unwanted interference and provide indications of points of interest or other anomalies in the transmission main.



Once the desired monitoring duration is complete, nodes are moved to a new location.

The EchoShore®-M system offers flexible deployment options to best meet current and future water company needs. It makes using advanced leak detection technology affordable, virtually anywhere in the world.

SERVICE CONTRACT APPROACH

- Echologics field crews conduct inspections
- Echologics leak detection engineers analyse data
- Acoustic data is stored on secured server

LICENSEE AGREEMENT APPROACH

- Water company enters fixed term licensee agreement
- Option of fixed monthly fee per minimum distance for technology rental
- Acoustic data is stored on secured server
- Water company has access to information
- Echologics provide standardised training to local staff

DATA CAPTURE AND ANALYSIS OPTIONS

- Water company can capture data and we conduct analysis
- Water company can capture data and conduct analysis with additional training and support

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FIELD APPLICATIONS

WATER CONSERVATION IN SOUTHEAST ASIA

If a leak detection programme's success is measured by the number of leaks found and the amount of water saved, then Air Selangor's programme is doing extraordinarily well. In the five years since adopting EchoShore-M, Air Selangor, the water operator for the state of Selangor and Federal Territories of Kuala Lumpur and Putrajaya, has surveyed more than 10,500Km of trunk mains, discovered and repaired 542 leaks, and reduced water loss by over 40 million litres per day.

For more information about us, or to view our full line of products, please visit www.echologics.com or call International Customer Service at:
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