The intelligence to protect the pipes you already have.





TD·Cloud TD·Edge

Pressure Transient IoT Device + AI Software

Built For
- **Operations, Maintenance & Reliability teams**
- **Planners, Renewals & Hydraulic Modellers**
- **Industrial and mining customers requiring 100% reliability**

The Problem

Pressure transients are a leading driver of pipe leaks and breaks — hidden, sub-second events that go undetected in conventional network data until they've already fatigued the pipe wall and caused cracks, leaks, or breaks. Left unmanaged, they drive up OPEX and CAPEX and non-revenue water (NRW), shorten pipe asset life, and disrupt customer service.

The Solution

TD.Edge — IoT device + on-device AI

Purpose-built, ruggedised edge device that runs the proven 'Snip' algorithm on-device, detecting pressure transients in real time at up to 100 Hz (>97% true-positive, <5% false-negative) — with ultra-low-power hardware delivering years of battery life.

TD.Cloud — the AI brain behind the data

Software that seamlessly integrates high-frequency data from TD.Edge devices, identifies likely root causes (e.g. pump or valve operations), flags the transients most likely to cause leaks and breaks, and predicts cumulative pressure fatigue and asset end-of-life — turning data into foresight for targeted intervention.

The Difference
- ✓ Reduce pipe breaks and $Ms in reactive maintenance
- ✓ Extend pipe asset life and save $Ms in deferred capital
- ✓ Reduce unplanned OPEX and avoid accelerating CAPEX
- ✓ Improve customer service levels
- ✓ Achieve regulatory and asset-performance targets

AT A GLANCE.

Sampling: 100 Hz
'Snip' edge algorithm: >97% TP, <5% FN

Communication: encrypted MQTT over CAT-M1/LTE-M
Latency: <5 min latency to TD·Cloud

Built tough: IP68 rated, -20°C to +70°C
Data security: in-region, encrypted in-flight at-rest

TD.Cloud software algorithms:
Grouping: >95% coverage, >95% TP, <20% FN
Propagation: co-detection with timing precision <40ms
Pressure related EoL: Cast-iron, PVC, mild steel
Dollarised capex deferral estimates

PROVEN RESULTS.

Reactive leaks/bursts with unknown root cause.

x4 reduction
Transient magnitude
Single valve adjustment

~$1.4M USD
Reactive maintenance saving
Shift to proactive maintenance

1 valve
Root cause identified
Customer-caused pressure fatigue

Four pipe breaks in the same area in six months.

+1000
Pressure events per week
From industrial customer valve

30% reduction
Results in 5 years
Asset life extension, no capex

$700K USD
Capex deferral per mile
Max stress at 51% capacity

Trusted By

Deployed globally.

Greater Western Water · Yarra Valley Water · South East Water

FIND. IDENTIFY. MITIGATE.

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