

**kamstrup**



**LEAK DIARIES:  
REAL STORIES OF  
NON-REVENUE WATER  
MANAGEMENT POWERED  
BY EMBEDDED ALD**

# What is a Leak Diary?

A Leak Diary is a short, field-verified account of a real leak identified using Kamstrup's flowIQ® 2200 and 3200\* meters with Acoustic Leak Detection (ALD) and Leak Detector software. These are not lab tests, simulations, or best-case scenarios. Each story reflects a real system, real conditions, and real crews responding to actionable insights generated by the network.

*\*ALD available in flowIQ meter sizes 2" and below*

**At Kamstrup, we spend a lot of time talking with utilities about data.**

**But what really matters isn't the data itself—it's what the data does in the real world.**

**That's where Leak Diaries come in.**

Some of the leaks you'll read about were located near an ALD meter. Others were discovered hundreds or even thousands of feet away—sometimes up to half a mile from the reporting meter—where traditional methods would have struggled or missed the leak altogether.

Each Leak Diary answers a simple question utilities care about:

**“Does this really work? And how can this help someone like us?”**



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# Acoustic Leak Detection, Built In

## *The Technology Transforming Every Meter Into a Proactive Defense Against Non-Revenue Water*

At the core of every Leak Diary is Kamstrup's Acoustic Leak Detection (ALD) — seamlessly embedded within the meter itself. Without adding hardware or complexity, each meter becomes a permanent leak sensor across your distribution network.

ALD listens to acoustic patterns traveling through the water column, identifying the distinct sound signatures of leaks from inside the pipe. Because detection occurs within the water, performance is not limited by pipe material or soil conditions.

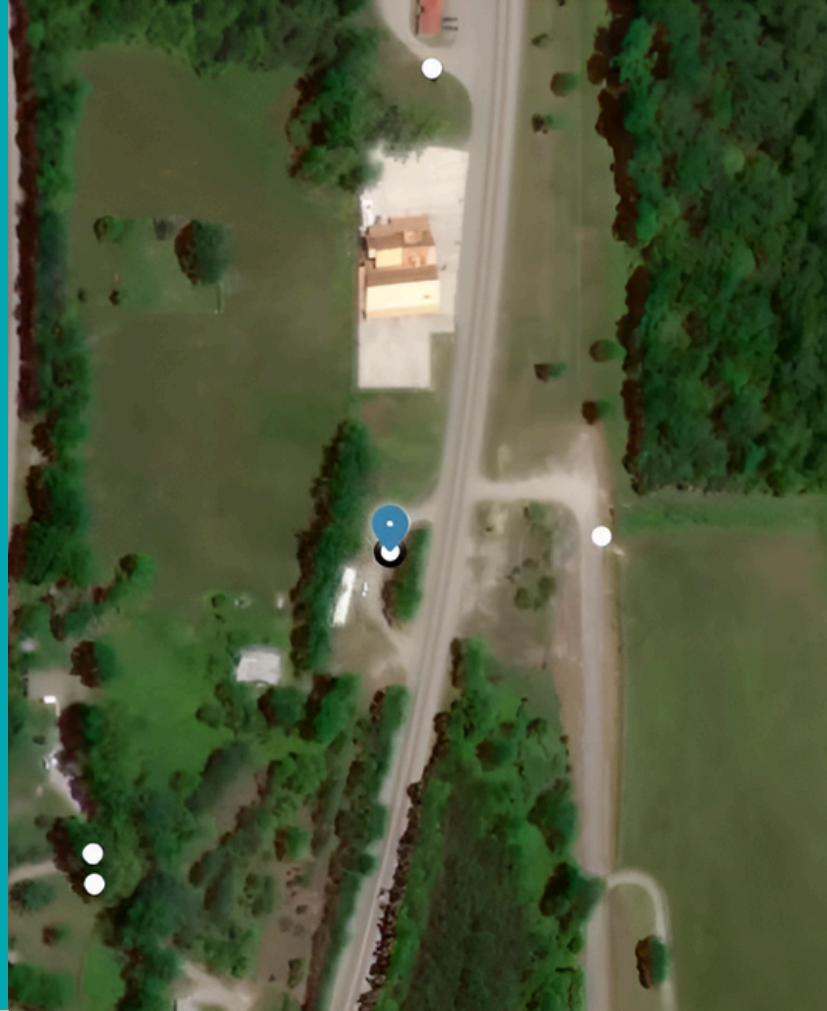
Advanced analytics filter background noise and isolate true leak signals with high confidence, delivering continuous, system-wide awareness. The result: earlier detection, more targeted response, and stronger protection of both water resources and infrastructure.

With Kamstrup embedded ALD, your meters don't just measure water. They safeguard your system — transforming existing infrastructure into a proactive defense against non-revenue water.



📍 Oneida, TN

# Single Meter Detects Leak on Poly Line

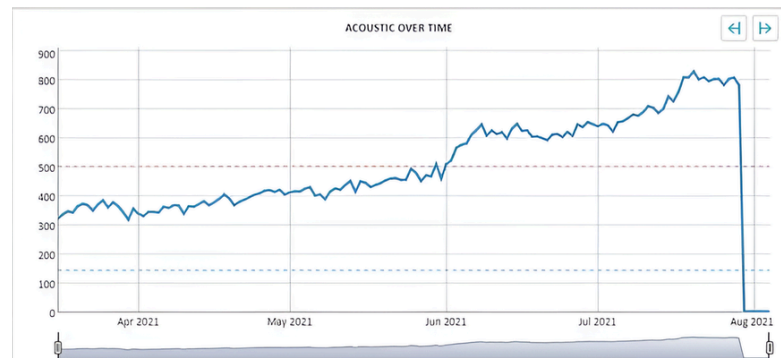


## Details

A flowIQ® 2200 detected a non-surfacing, utility-side leak, located 50 feet upstream from the meter on a polyethylene service line. At 4 GPM, this leak was losing 111,600 gallons daily.

## Impact

ALD listens inside the water column, enabling early leak detection, even on plastic pipe.



📍 Row River Valley, OR

# Main Line Leak Heard 1/2 Mile Away

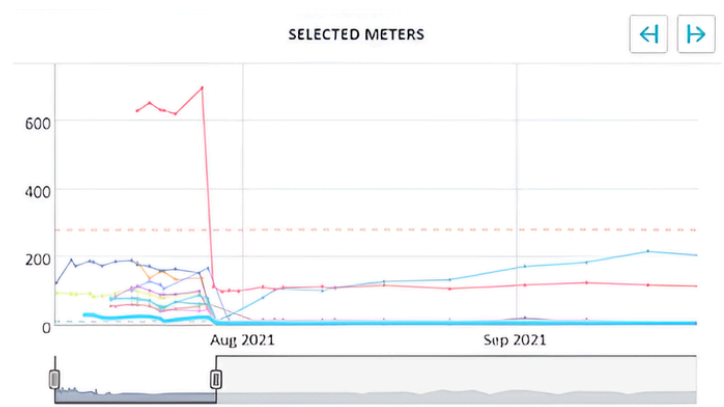


## Details

In the town of Dorena, OR, a 30 GPM leak was reported by several surrounding flowIQ 2200 meters. The leak was heard on both ends of a 14" galvanized main by meters up to a half mile away.

## Impact

With leak detection built into your infrastructure, long-range detection scales to network-wide monitoring.



# Leak On a 12" Main



## Details

In Ephrata, PA, a leak from a stainless steel clamp on a 12" main was discovered with embedded ALD. The leak was detected by meters 55 feet away on a copper service line.

## Impact

The utility was able to find the leak, manage it and fit the repair into their normal schedule. Following the repair, the utility saw a slight uptick in the acoustic signature, signaling a potential new leak set in motion by the return to normal system pressure.



# Leak Detected Past a Competitor Meter

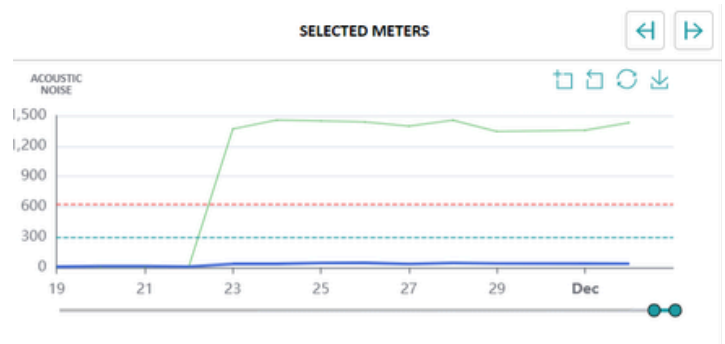


## Details

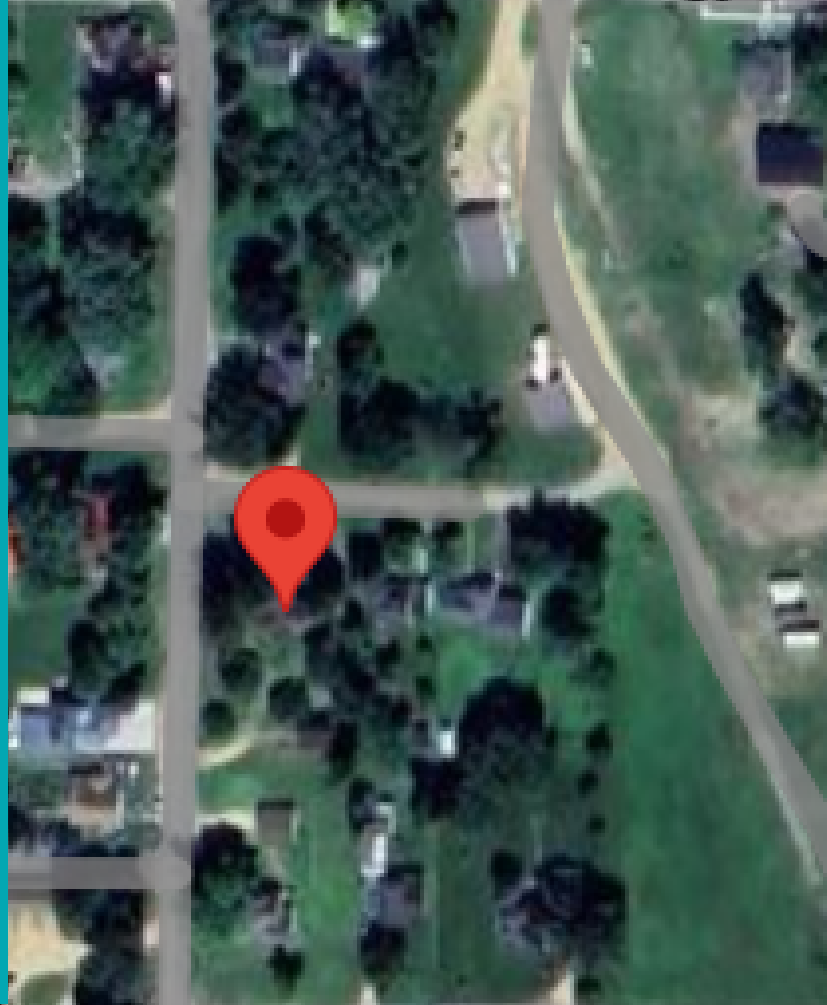
Through an ALD pilot in the City of Pierre, SD, a single flowIQ® 2200 meter installed in a mobile home park reported a nearby leak. When crews investigated, they found water coming through the floor of a vacant neighboring home — equipped with a competitor’s meter that failed to detect it.

## Impact

The leak would have eventually been found and fixed, but only after extensive damage would have been done to the home.



# Leak Found Inside a Curb Stop With AMR



## Details

A leak was found via Drive-By AMR (with built-in ALD) 2 feet inside a curb stop and 50 ft from the reporting meter. The non-surfacing leak was draining into a sewer.

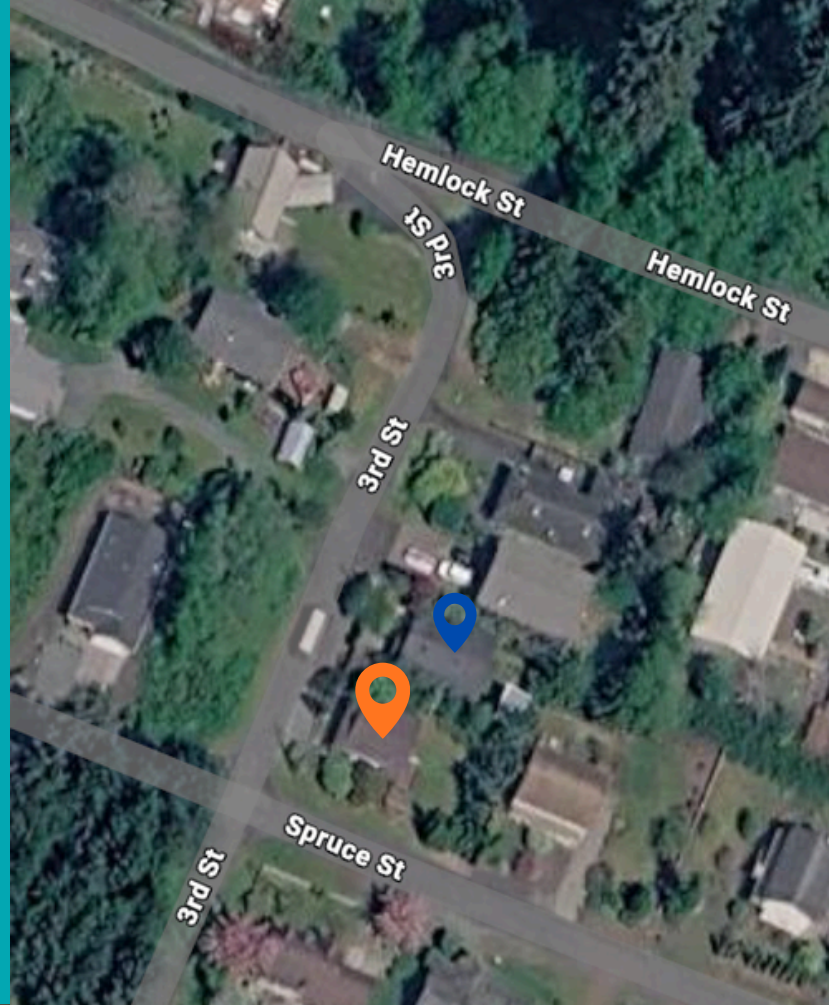
## Impact

Because the leak was found early, the utility was able to fix it before temperatures dropped. Freezing temperatures would have exposed the leak and likely forced a water outage for nearby homes along with a more costly repair.



📍 City of Wheeler, OR

# Not All Leaks Are *Main Line* Leaks

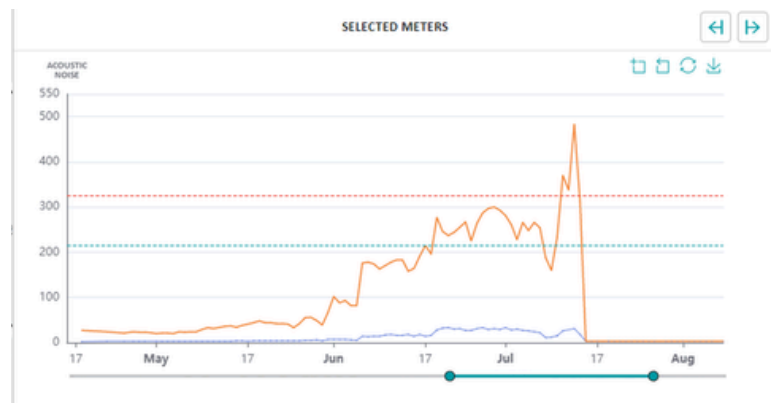


## Details

In Wheeler, OR a leak was detected by two meters, one of which reported a significant increase in noise. A crew investigated the specific meter and discovered a service line leak.

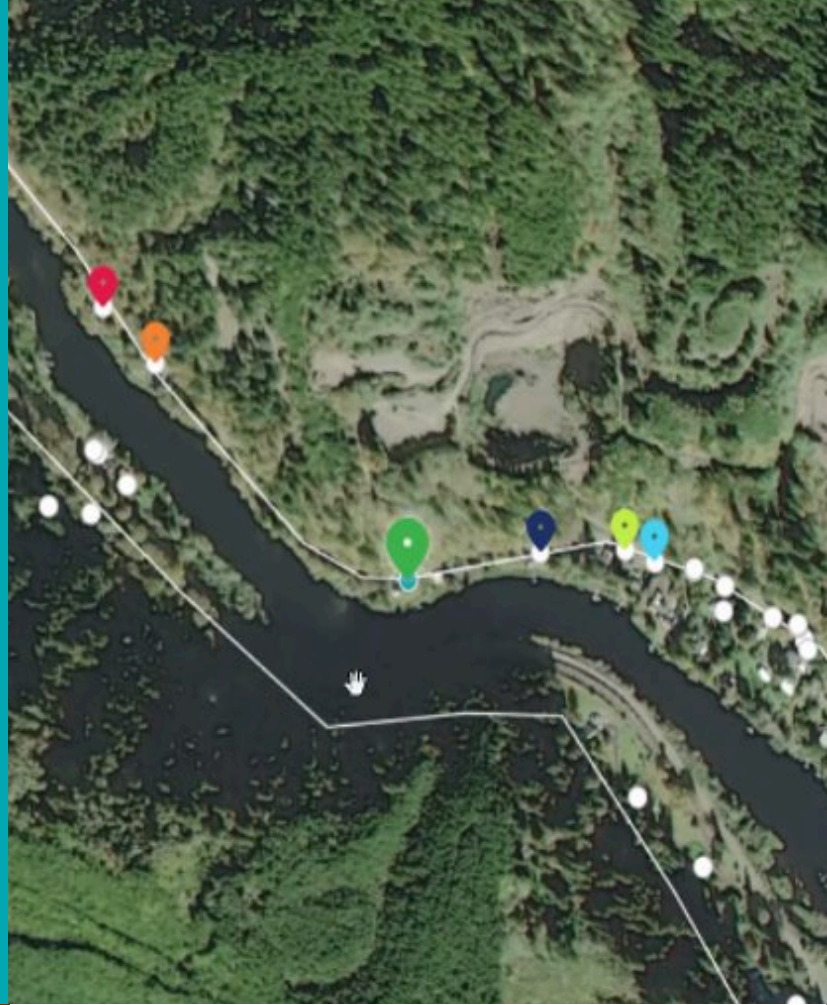
## Impact

The higher orange line was able to identify the specific meter so that it could be scheduled and repaired.



📍 Mapleton Water District, OR

# 180 GPM Leak Detected, Found, and Repaired



## Details

A 180 GPM leak was detected, found, and repaired over 1500 ft from the nearest meter on a 6" AC Main. Over the following days, as pressure returned, a second leak sprang and was quickly identified with ALD so it could also be repaired.

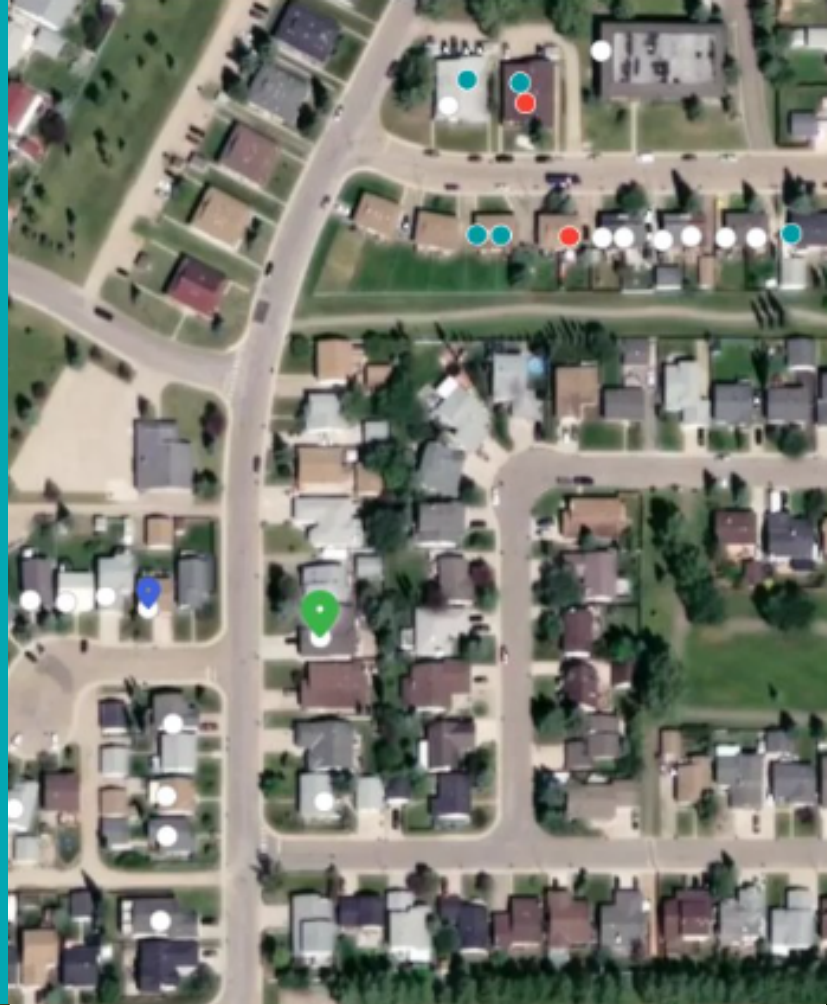
## Impact

The technology is able to continue to monitor even after a repair has been made so that potential leaks can be identified soon after a leak has been repaired and before the repairman has left the area.



📍 Olds, AB, Canada

# The Small Leak That Lost 86,000 Gallons



## Details

In Olds, AB, a 2 GPM leak was detected by an ALD meter approximately 50 feet away. The leak was confirmed and estimated to have been running for about a month, totaling ~86,000 gallons.

## Impact

The leak repair was delayed due to the weather, but was monitored closely. It was completed the following April under safer, more cost-effective conditions.



# THE NEXT STEP IS YOURS

Reduce non-revenue water and secure significant savings with Kamstrup's smart metering solutions.

## Identifying Leaks & Capturing Non-Revenue Water

ALD saves utilities the cost of performing annual leak surveys, as many as

**7,300+**

Built-in to every meter <2", ALD offers more monitoring points per survey

**10X**

In as little as three months, Oneida, TN reduced water loss by

**36%**

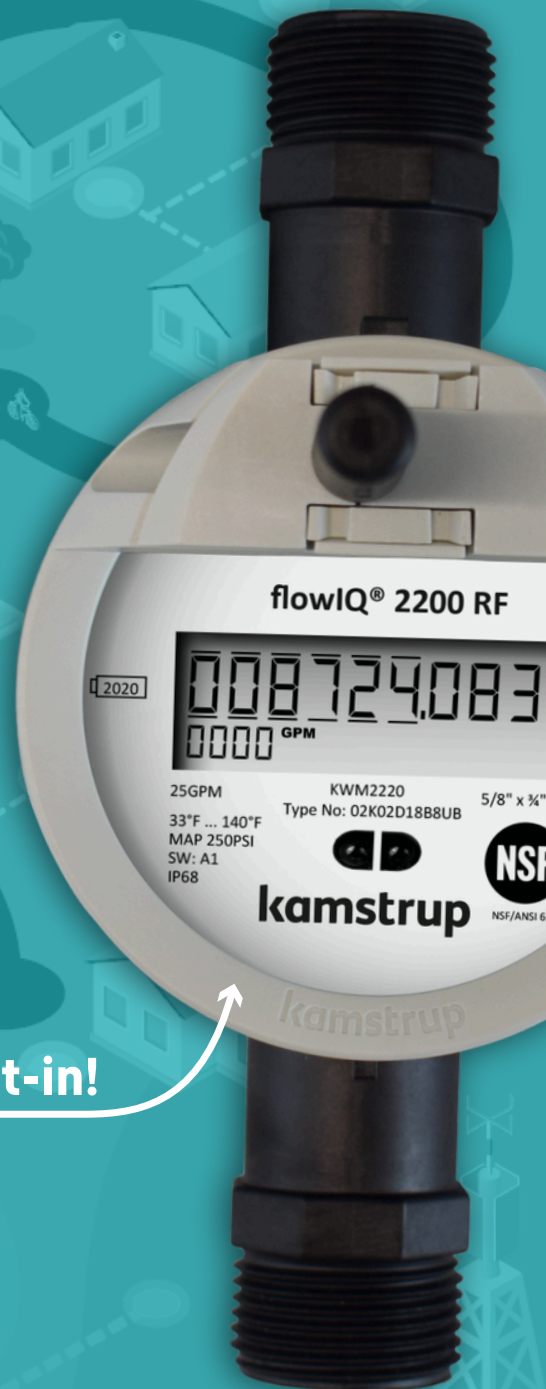


## How Much Could Your Utility Benefit?

Let's find out!

[+ Learn More](#)

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It's all built-in!