Tether Pulse Meter

Water and Gas Monitoring

Gas

Water

tether™

The Tether Pulse Meter is a rugged, wireless IoT device that converts traditional water or gas meters into smart monitoring endpoints, seamlessly integrated into the Tether software platform.

It enables real-time usage tracking, historical logging, and automated alerting for building managers and sustainability teams.

Its waterproof IP67-rated housing and internal temperature/humidity sensors make it ideal for both indoor and outdoor use. The device is battery-powered and mounts easily with a screw-in base.

Track water and gas use in real time

Automate reporting

Instant alerts for leaks or abnormal usage

Compare sites to spot inefficiencies

Install in minutes

Typical Applications

Remote water and gas metering in commercial or industrial buildings

Irrigation networks and agricultural infrastructure

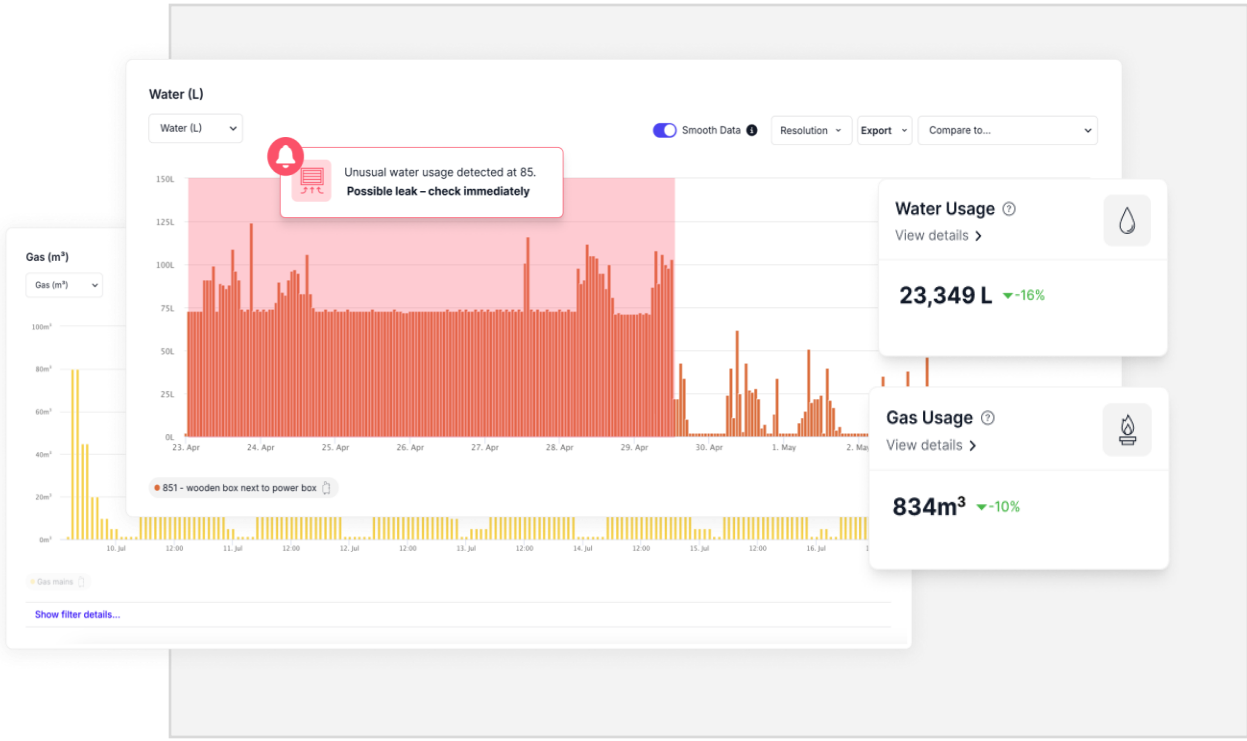
Ideal for properties with restricted access or legacy metering infrastructure

Utility tracking across campuses, precincts, or large portfolio

Seamless integration with ESG reporting and sustainability audits

Tether Pulse Technical Specifications

Pulse & Sensor Specifications			
Sensor/Pulse	**Units**	**Range**	**Accuracy**
Gas Pulse	m^3	-0 to 1,000,000+ pulses/day (depends on meter)	*±1%
Water Pulse	Litres	0 to 1,000,000+ pulses/day (depends on meter)	*±1%
Temperature (enclosure conditions)	°C	-30°C to +70°C	±0.3°C (0–70°C), ±0.6°C otherwise
Humidity (enclosure conditions)	%	0% to 100%	±3% (10–90% RH), ±5% otherwise



*The accuracy of the unit measurement depends on the meter it's connected to — and most modern utility meters are accurate to within ±1%.

Tether Pulse Technical Specifications

Tether Pulse Operation

The Tether Pulse Meter begins operation once installed and provisioned via the mobile app. Data is transmitted securely to the Tether cloud via LoRaWAN at regular intervals. Alerts and reporting functions are available through the Tether dashboard, enabling portfolio-wide visibility and timely interventions for water or gas anomalies.

Tether Pulse Physical Installation

The Tether Pulse Meter connects to a water or gas meter via a short cable. The meter's pulse leads send a small signal each time a set amount of water or gas flows through.

Since pulse outputs vary by meter type, Tether will help source the correct leads to ensure compatibility and easy installation.

Power Specifications

Battery	4000 mAh replaceable Li-$SOCl_2$ (1 or 2 cells optional)
Battery Life	~5 years at 10 min interval (12 counts/day)

Key Features

- **Converts legacy water and gas meters into IoT-connected devices**
- **Fully integrated with the Tether platform for usage monitoring, leak detection, and automated alerts**
- **IP67-rated, suitable for harsh and outdoor environments**
- **LoRaWAN long-range transmission (up to 10 km line of sight)**
- **Supports flexible pulse counting and digital input modes**
- **Internal memory stores 2,200+ records with retransmit**
- **Replaceable battery with ~5-year life, no mains wiring required.**

Tether Pulse Technical Specifications

Mechanical Specifications	
Waterproofing	IP67
Dimensions	105.6 mm × 85.2 mm × 27 mm
Weight	Approx. 150g (with 1 battery)
Mounting	Screw-in base
Material	ABS + PC

Connectivity	
Protocol	LoRaWAN
Tx Power	Up to 20 dBm
Sensitivity	-137 dBm
Supported Bands	CN470, EU868, US915, AU915, others
Join Mode	OTAA or ABP

Reading Intervals (configurable via Downlink)

The following default reading intervals have been carefully chosen to maximize battery life while still maintaining valuable and usable data. Reading intervals can be configurable if needed.

Metric	Interval
Pulse Count	Every 10 min
Temperature	Every 10 min
Humidity	Every 10 min