

WATER DISTRIBUTION 101:

KNOW YOUR SMART WATER METERS

O1 WHAT IS A SMART WATER METER?

Smart water meters are networked devices that monitor household water consumption in real time. Unlike traditional water meters, smart meters use communication technologies to provide accurate, high-definition water usage data to consumers and utilities. The timely collection, analysis, and delivery of this information can positively impact consumer water use behavior and enables water agencies to effectively manage supply and demand.



Smart water meters come in different shapes and sizes. The installation, compatibility, and performance of each model varies by brand.

02 PARTS OF A SMART WATER METERING SYSTEM

A **smart water metering (SWM) system** may be composed of several components:

- **+ Flow monitoring sensor:** An **electronic sensor** that measures and records water flow can either be located inside the meter or attached to it.
- + Communications network: Smart water meters transmit water data to the utility for customer billing. The network's coverage and connection quality depends on the type of communication technology used (wired, wireless, or a combination of both). Customers can access their consumption data through an online portal or companion mobile app.

03 WHY SMART WATER METERS?

Pros

- + Provides **real-time water** usage & consumption data
- + Remote monitoring
- + Efficient leak detection & repair
- + Ensures accurate billing
- + Helps users identify water consumption patterns & inefficiencies
- + Easy to install & maintain
- + Eligible for **rebates**
- + May be recyclable
- + Streamlines utility operations & maintenance

Cons

- + Initial **learning curve**
- + **Higher purchasing cost** than traditional meters
- + High utility deployment & maintenance costs
- + Lack of existing infrastructure to support smart metering
- + Potential interoperability issues