

Build a Smart Metering Solution that is Power Efficient, Secure and Reliable



Today's water and gas utilities are facing unprecedented challenges. With water and energy conservation a major concern around the world, in addition to rising operating costs, aging infrastructure, changing customer expectations, and heavy government regulations, modern utilities have a lot on the line.

To address these changes, a new breed of utility meter has arrived — known simply as the smart meter.

The Global Strain on Water and Energy Resources

By 2025, the world population is expected to reach

7 Billion



Around the world, water and energy resources are being strained more than ever before. For water and gas utilities, these shortages have resulted in the imminent need for innovative solutions while facing the following:

Only **30%** of water being lost each year is accounted for globally
UNEP-WWAP, 2018

Nearly **50%** increase in world energy usage by 2050
EIA, Sep 2019

Global water demand for all uses will increase by **20%** to **30%** by 2050
UNEP-WWAP, 2018

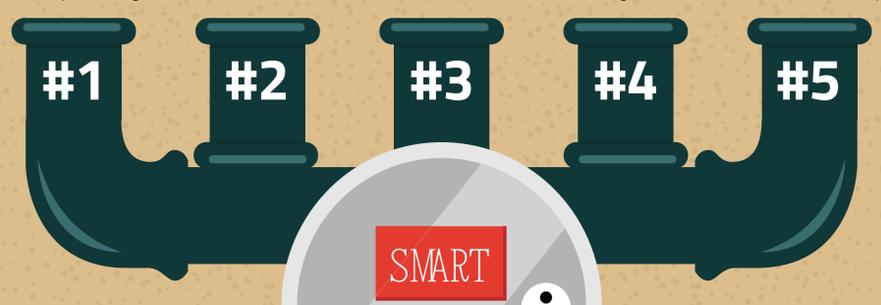
Over **80%** of residential water meters are still mechanical, leading to major inefficiencies and resource losses
idrometech, 2020

The 5 Major Challenges of Today's Water and Gas Utilities

Water and gas utilities have five major challenges before them that must be solved in order to remain competitive in today's demanding market.

Utility Challenge

- Getting accurate measurements for consumption billing
- Reducing the loss of non-revenue water (NRW)
- Improving customer service
- Improving asset and workforce management
- Ensuring customer privacy on critical infrastructure security



How Smart Meters Solve Utility Challenges

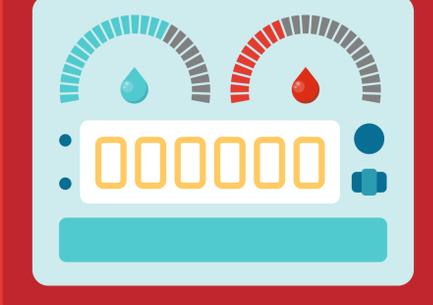
Smart meters were developed to help utilities solve these challenges — here's how they do it:

Smart Meter Solutions

- Accurate Metering**
By deploying different types of measuring technology on all meters equipped with intelligent communication modules
- Improved Revenue**
Leakage detection/reduction, proactive monitoring and the ability to pinpoint small leaks before significant damage is caused. Reduction of apparent losses (theft detection)
- Customer Satisfaction**
Better customer experience with greater billing accuracy and no service supply interruptions
- Operational Excellence**
Better maintenance, faster repairs, better asset management
- Security**
End-to-end security from meter to metering platform

A Closer Look At Smart Meters

Fully digitized, the smart meter is able to provide utilities with unprecedented insights, control, and intelligent precision.



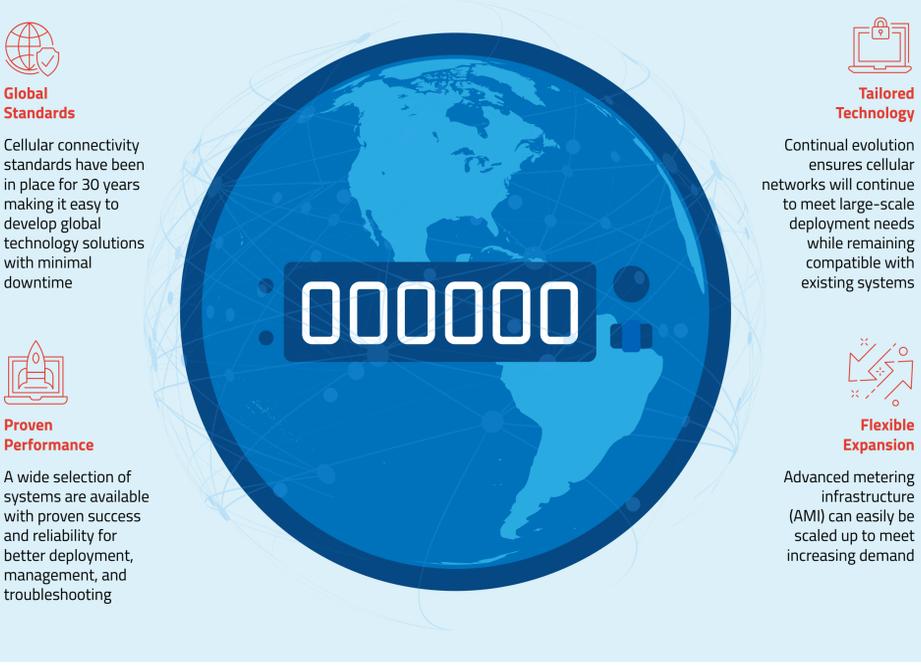
With this real-time information in hand, utilities are then able to proactively respond to conditions and issues as they arise (such as leaks), thereby dramatically reducing operational inefficiencies and losses.

Connected through local cellular or wide area networks as part of the Internet of Things (IoT), these smart meters relay information in real-time to their controlling utilities.



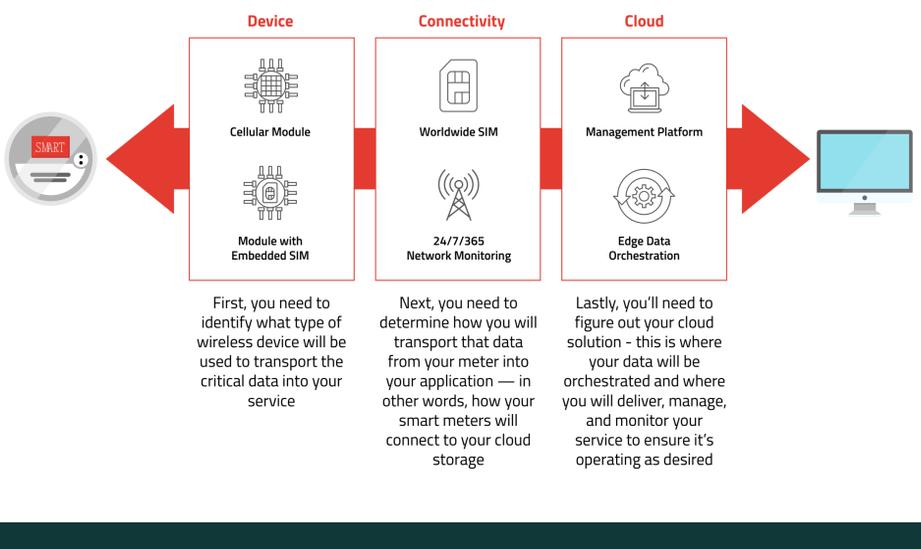
The Global Rise of IoT Smart Metering

Large-scale IoT smart meter solutions deployments are rapidly being installed around the world — and growth is expected to continue for several reasons:



Considerations for Building Smart Meter Infrastructure

Ready for a smart meter transition? Before you begin, you will need to consider the following three building blocks that are critical to building your smart meter infrastructure:



Our Mission is to Secure the Data for Utilities

Sierra Wireless is the only cellular IoT company with a comprehensive approach from device to network to cloud. Our IoT smart meter solutions use mutual authentication to ensure only authorized devices gain access and encryption to protect data while in transit, and our additional security mechanisms include:



- Secure Boot** to help devices resist attacks and infections from malware
- Secure Firmware-Over-the-Air (FOTA)** updates to ensure update image legitimacy
- Authentication Vectors** to add extra protection to the mutual authentication process
- Network Security Features** like private APN and secure data centers to prevent data breaches

Start Your Smart Metering Journey Today

Sierra Wireless is a leading provider of smart metering solutions, and there are tens of millions of devices around the world using our technology.

Contact us today to get started on your smart meter journey.

GET STARTED TODAY