

The Aclara STAR® Network for Water Utilities



Single Network. Many Solutions.

A water system is more than just getting water from the tower to the faucet. As a water utility, you need to know the who, when, where, and how much of water usage in order to properly bill your customers and conserve your resources. Beyond that, factors such as location, temperature, topology, population, and access to water all affect how you plan and develop the water system.

Aclara's flexible and scalable STAR® Network AMI system provides solution options to collect and manage usage data for large and small utilities. Our one- and two-way AMI solutions allow you to get the most from your water data.



What can you do with your AMI water data?

- **Improve billing accuracy**
Provide exact billing and eliminate the costs associated with the meter reads and estimated bills
- **Help customers identify leaks**
Allow customers to monitor their hourly water usage to identify anomalies, which can link back to a leak within the home
- **Increase revenue**
Manage meter data to promote a strong financial performance by predicting leaks, tracking trends, monitoring water distribution and theft, and detecting tampering and equipment damage
- **Reduce non-revenue water loss**
Analyze consumption patterns and quantify possible system leaks within the distribution system
- **Educate customers**
Provide hourly consumption data to keep customers informed of their water usage and help with conservation efforts
- **Set structured rate plans**
Implement smart rate structures to match the consumer's overall and peak water usage
- **Improve customer service**
Integrate meter data into billing systems to eliminate human error and provide faster response to customers

Create Your AMI Solution

The strength of the Aclara STAR Network is its flexibility. Your Aclara AMI solution can mix-and-match one- and two-way meter transmission units (MTUs) to capture the AMI data for all your customer types.

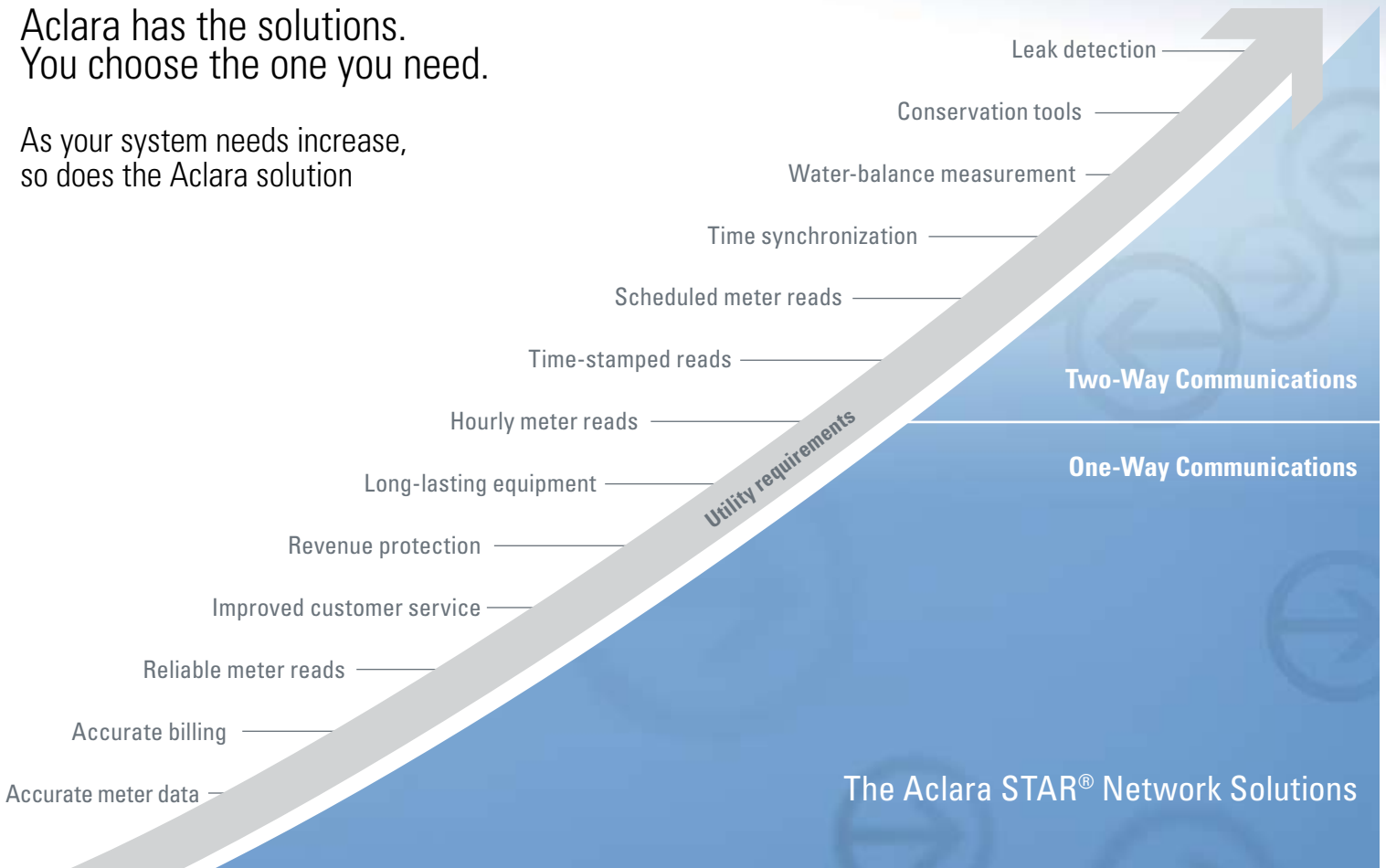
You may choose one-way MTUs for twice-a-day readings from residential customers. Then, choose two-way MTUs for the larger commercial customers to capture hourly meter reads and take advantage of advanced distribution control and system time-synchronization.

STAR Network MTUs work together to form a custom solution.



Aclara has the solutions. You choose the one you need.

As your system needs increase,
so does the Aclara solution



Aclara Series MTUs

One-Way Communications



- Delivers accurate meter data
- Sends meter data reliably to the utility
- Ensures data and system security
- Reads each meter twice a day
- Allows billing for exact usage (no estimates)
- Transmits meter data over a range of at least one mile
- Stands up to harsh basement and pit installations
- Handles dual-port operation
- Maintains a 20-year permanent battery
- Improves customer service with faster access to data
- Detects tampering and equipment damage

Upgrade to two-way communications without major changes or cost

Two-Way Communications



- Delivers accurate meter data
 - Sends meter data reliably to the utility
 - Ensures data and system security
 - Allows billing for exact usage (no estimates)
 - Transmits meter data over a range of at least one mile
 - Stands up to harsh basement and pit installations
 - Handles dual-port operation
 - Maintains a 20-year permanent battery
 - Improves customer service with faster access to data
 - Detects tampering and equipment damage
- PLUS:**
- Captures hourly meter data and transmits four times per day
 - Transmits meter data up to eight-digit registers
 - Synchronizes all system clocks to within one second
 - Time-stamps all meter reads
 - Provides data for calculating accurate water balances
 - Allows for scheduled meter reads
 - Provides data to assist with leak detection before and after the meter
 - Works with additional leak detection system to pinpoint leak locations

Two-Way Communications – It's time to synchronize

Time-synchronization allows utilities to accurately determine how much water is actually reaching consumers. By setting all system clocks to the same time—synchronizing them—Aclara makes it possible to take a system-wide reading of all meters. This snapshot of water consumption serves as the basis on which to accurately calculate water-system balances, a process that without synchronization is difficult and time-consuming. What's more, once the amount of any water loss is calculated, utilities can begin the process of identifying the sources of non-revenue water.



The Aclara STAR Network system is the leading fixed-network solution for water utilities, with millions of end points operating throughout North America. The proven Aclara AMI solutions work over FCC-licensed, 450- to 470-MHz radio frequencies to automatically collect meter readings and provide the information you need to perform leak detection, conserve resources, reduce theft, and improve customer service. No other system employs the range of communication options used by the Aclara STAR Network system including cellular, radio signals, land lines, fiber optics, Ethernet, and Wi-Fi. The Aclara STAR Network system delivers innovative and expandable designs, long-lasting equipment with 20-year batteries, and the ability to handle one-way and two-way communications.

Aclara

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