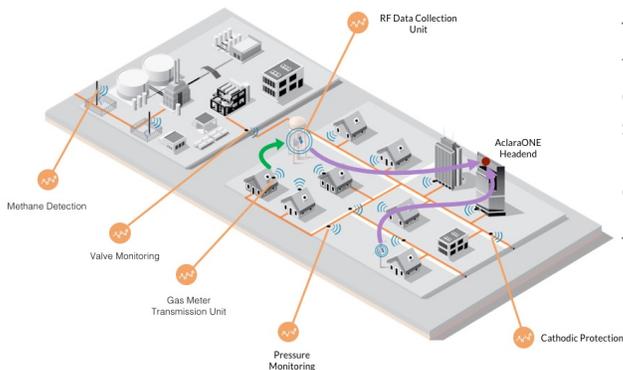


Aclara RF Network for Gas Utilities



The Aclara RF Network for gas utilities offers two-way communications that go beyond AMR by securely and accurately reading gas meters electronically – without meter readers, drive-by vans, or handhelds. Our solution provides hourly, time-stamped and time-synchronized meter readings that can help large and small gas utilities improve their business operations.

The Aclara RF Network’s AMI radio topology consists of three components:

- Meter Transmission Unit (MTU)
- Data Collector Unit (DCU)
- AclaraONE™ (One Network for Everyone)

For back-end data management and business analytics, Aclara offers a meter data management (MDM) solution, leveraging a standards-based, secure approach to enable meter data availability to all utility applications. Once the data is processed it can be accessed across the entire utility organization for a wide variety of applications, such as:

- Billing
- Revenue assurance
- Leak management and loss analysis
- System capacity planning
- Consumer engagement

SERIES 3500 GAS METER TRANSMISSION UNIT (MTU)

At the heart of the Aclara RF Network for gas utilities, is the series 3500 MTU. It provides the gas utility with accurate and timely data to support revenue management by reducing meter reading and billing errors. The series 3500 provides a complete system read with all the necessary information to reconcile the amount of gas entering the system to the billable gas that is consumed, thus identifying the probability of system leaks. The collected network data delivers improved response time, better customer service, faster emergency response and vital load management information.

DATA COLLECTION UNITS (DCU)

The DCU will help utility staff maintain the reliability of aging infrastructure and improve efficiency and capacity through enhanced asset management, monitoring and timely communication. Benefits include:

- **Existing WAN compatibility** – Utilities can leverage current communication networks and choose the most cost-effective backhaul without the worry of compatibility.
- **Safety and security** – Initiates an immediate message transfer upon receipt of an event or alarm from an MTU.

The DCU transmits and receives data over individual 450 to 470 MHz radio frequencies. Powered by either solar or AC with a battery back-up. The DCU time stamps, processes, and stores diagnostic information and data collected from MTUs.

DCUs decode and error-check the received data before storing it in local memory, as well as transmit data for further processing to the NCC, and sends commands and alerts to the MTUs. DCUs can use a variety of back-haul communications technologies, including many types of IP-based networks or back-haul solutions such as cellular, Wi-Fi, Ethernet, and fiber optic.

DCUs are installed throughout the service territory on a wide variety of assets, including municipal and utility building roofs, gas or other towers, street lights, and utility poles. The units are typically installed on a 1.5 mile grid. One Aclara RF Network DCU will support several thousand meters in a typical urban area. Each MTU is typically heard by multiple DCUs to provide an additional layer of data redundancy.

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ACLARAONE™ (ONE NETWORK FOR EVERYONE)

AclaraONE a powerful platform that enables Aclara’s communications technology and adds comprehensive solutions to transform business operations, increase efficiencies, reduce costs and increase customer satisfaction. Built to provide actionable insights and the situational awareness required to handle growing distribution challenges, AclaraONE allows gas utilities to securely, reliably, and efficiently operate their distribution networks.

From meter to cash, network management, distribution operations, sensors, analytics, installation services, and consumer engagement, AclaraONE delivers the broad set of functionalities utilities require to monitor, optimize and improve the operation of their infrastructures under a single platform for networks ranging in size from a few hundred meters to millions of meters. Equipped with robust, scalable, next-generation AclaraONE smart infrastructure solution (SIS) software, network operators can react faster and more effectively while improving the technical and economical operation of their distribution network.

The AclaraONE platform supports the complete lifecycle of an advanced metering infrastructure network through a headend that:

- Installs, recognizes, and administers gas devices and their pairings with Aclara communication modules through a common, easy-to-use interface and user experience.
- Supports secure roles-based access, including single-sign-on, user authentication, and integration with Microsoft Active Directory®, so network messaging on the AclaraONE platform is reliable, robust, and secure.
- Drives persistent consumer engagement. Aclara ACE® is adaptable and flexible enough to mold solutions to meet your utility’s needs, whether you want to deploy a behavioral program, showcase AMI data, redefine your customer’s digital experience, inform users with advanced load-disaggregation models, or leverage alerts to keep customers engaged.
- Engages your customers online, on their tablets, or through their mobile device with our full suite of Aclara ACE features, thanks to our modern, responsive web design. Provide your customers with 24x7 access to billing, consumption, and conservation tools to drive customer self-service through our My Bills, My Usage, and My Savings modules.

