

# Case Study

## Mueller Systems Enables Smart Metering to Lower Operating Costs and Conserve Valuable Resources



### Customer Profile

Customer: Mueller Systems  
Location: Cleveland, NC  
Industry: Utilities/Smart Metering

### Challenge

- Find a 900 MHz Omni antenna that would meet Mueller's Mi.Net® system requirements

### Solution

- COTS antenna HGV-906U and COTS low loss coaxial cables, CA-TMNMA004

### Results

- Successful implementation of the Mi.Net® Smart Metering Network

### Challenge

Mueller Systems provides smart metering solutions to optimize the delivery and use of energy and water. Municipalities that supply electricity, water or gas, or any combination of the three services, need innovative ways to increase efficiencies, reduce costs, conserve energy and water, and improve customer service. The Mi.Net® Mueller Infrastructure Network for utilities from Mueller Systems meets that need.

The Mi.Net® System is a communications network that fully automates the meter-reading-to-billing process, linking meters, distribution sites and control devices in a single, highly efficient data network. The Mi.Net® System is flexible and scalable, enabling utilities to deploy newer technology in stages, as their needs and budgets allow.

Mueller Systems required a high performance, robust 900 MHz Omni-directional antenna to meet the needs of its Mi.Net® wireless metering system. The antenna needed to integrate with Mueller's Mi.Net® repeaters and be able to stand up to the elements as well as support Non Line of Sight (NLOS) and mobile applications where high gain and wide coverage is required.

### Solution

After consulting with Mueller's engineering team and reviewing the system requirements, L-com positioned its 800/900 MHz HGV-906U all-weather Omni-directional antenna. The HGV-906U features a lightweight fiberglass radome, integrated N-Female connector and superior all weather performance. Mueller also chose L-com's high performance low loss coaxial cables to connect the HGV-906U to the Mi.Net® repeaters.

### Results

Mueller Systems is now able to offer an end to end wireless metering system to their customers which provides increased operational efficiencies, lower operating costs and greater conservation of resources. Users of the Mueller Mi.Net® Network will also reap the benefits of real time system monitoring and simplified billing for residential, commercial and industrial customers to manage resource consumption across their enterprise.

