

An aerial photograph of a city, likely San Francisco, is the background. A network of white lines and dots is overlaid on the image, representing a communication network. The lines connect various points across the city, with some points highlighted in white and others in red. The overall color scheme is blue and red, with a bright light source in the center of the city creating a lens flare effect.

# MUELLER

## MI.NET<sup>®</sup> NODE

### LORAWAN<sup>®</sup> CLASS B METER INTERFACE UNIT

Leveraging the Low Power, Wide Area Network (LPWAN), the Mi.Net<sup>®</sup> LoRaWAN (LW) node is the water industry's first Class B LoRaWAN radio transmitter - capable of delivering the fastest two way wireless communication without compromising battery life.



Water utilities are challenged to meet greater public demand, reduce cost and consumption, optimize resources and efficiency, and provide unparalleled customer service. The Mi.Net® LoRaWAN® (LW) node supports the digital transformation of smart water operations by helping utilities go beyond automated reading and improve utility efficiency with advanced metering infrastructure (AMI) based on Low Power Wide Area (LPWAN) network protocol.

The Mi.Net LW node is the only solution in the water metering industry that delivers the fastest two-way wireless communication with an unparalleled level of flexibility for long term deployment – all without compromising battery lifespan.

Implemented with LoRaWAN Class B mode, the Mi.Net LW node permits data to be collected and transmitted remotely within seconds. This effectively streamlines operations and reduce cost, which results in a quick return on investment.

## FEATURES



### SYSTEM FEATURE

The node transmits water meter data to the LoRaWAN network

daily, via an unlicensed radio frequency.

On-demand reads to the node can be requested and delivered within seconds.



### CONSTRUCTION

Fully encapsulated design – eliminating any possible pathways for moisture intrusion.

This AMI endpoint is design to survive life inside the meter pit and be subjected to the harshest of conditions.



UPDATING...

### SCALABLE & UPGRADABLE

The node's functionality allows for upgrade to be performed remotely and autonomously.

All units can be upgraded at one scheduled time and the system will notify the user when the process is completed.

O-ring sealed thermoplastic enclosure, coated electronic board and potting compound provide a watertight package to prevent moisture intrusion

Besides consumption data, alerts such as leak detection, no flow, reverse flow, register removal, low battery alarm and more, are constantly monitored

Provides a direct connection to all Mueller water meters equipped with an encoder register

Seamlessly connects directly to the Mueller Systems Model 420 Remote Disconnect Meter (RDM) for easy and secure valve actuation through the user interface



## BENEFITS



### FAST END TO END RESPONSE TIME

Unlicensed spectrum system that allow signals to move through fewer or no mid-point nodes, swiftly to its destination. Reduced delayed time attribute to identifying outage information quicker.



### REMOTE DISCONNECT ENABLED COMPATIBILITY

Eliminate the need for truck rolls; the node is compatible with Mueller Systems 420RDM. Utilities can remotely initiate a command to turn water service on or off.



### 20 YEAR LIFE

LoRaWAN mitigates battery life issues through addition of gateways. The Mueller node is designed to include a large lithium battery that provides plenty of power and warrants for a 20-year life inside the meter pit.



### SECURITY

LoRaWAN employs two layers of strict security measures. With network security, it ensures authenticity of the node in the network, while the application layer of security ensures the network operator does not have access to the end user's application data.



### OPEN STANDARDS

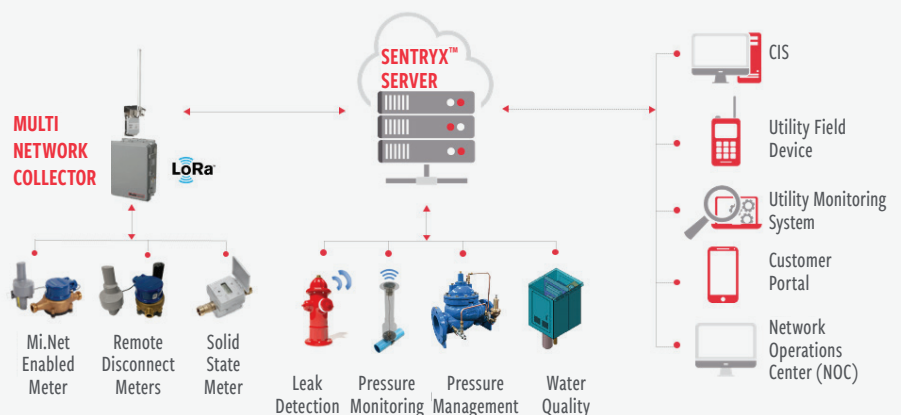
Flexible to deploy, scale and/or leverage private and public networks in a cost-efficient manner, along with interoperability at the network and device levels. Beyond AMI, utilities can go further to implement other smart city initiatives.

## MUELLER SMART WATER INFRASTRUCTURE NETWORK

The Mi. Net system, supported by Mueller Sentryx™ Water Intelligence platform, delivers a robust and secure two-way communication network for transmitting meter data and infrastructure management information.

The connectivity of Mi.Net LW nodes, meters, distribution infrastructure and control devices in a single smart water network enables:

- business operation efficiency
- progressive customer service
- active water management programs

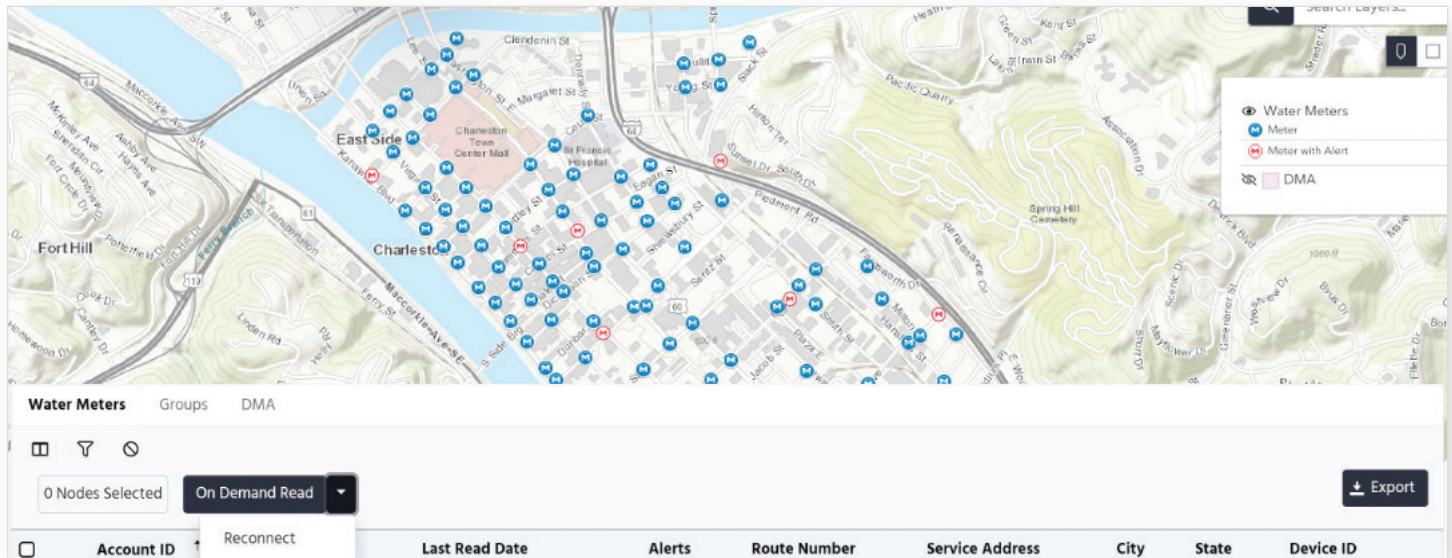


## CASE STUDY

The Town of Florence's comprehensive Smart City Agenda for infrastructure and connectivity advancement, not only includes implementation of smart water metering solution, but also technological applications for wastewater, public safety, and more.

To support the smart water metering agenda, Mueller Systems and Ferguson WaterWorks deployed more than 3,000 Mi.Net LW nodes, integrated with Advanced Metering Infrastructure (AMI) system throughout Florence.

Sentry™ Water Intelligence Platform – Water Meters User Dashboard



*“The deployment of smart meters is accelerating our journey toward digital transformation and the foundation required to build out our smart city grid,” said Brent Billingsley, Town Manager of the Town of Florence. “We are confident that this open source network solution will provide new operational efficiencies, enhanced service opportunities and additional revenue streams.”*

Are you ready to meet greater public demand, increase efficiency, and reduce non-revenue water with Mi.Net® LoRaWAN® Class B node? Start a conversation with us today at **800.423.1323** or visit **<https://marketing.muellerwp.com/LWnode>**

**For more information about Mueller or to view our full line of water products, please visit [muellersystems.com](https://muellersystems.com) or call Mueller customer service at 1.800.423.1323.**

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