

### **MUELLER AND THE LORA ALLIANCE**

Innovative Solutions for Smart Cities



# TECHNOLOGY FOR THE EMERGING SMART CITY

#### INNOVATIVE SOLUTIONS FOR SMART CITIES

By leveraging the Internet of Things (IoT), municipalities can transform their water systems into open communications systems, enabling them to improve the service they offer their customers and increase the connectivity of all city services.

As a member of the LoRa Alliance®, Mueller is bringing IoT technology to water infrastructure through its Mi.Net® – Mueller Infrastructure Network for Utilities advanced metering infrastructure system.

LoRa Alliance® is an open, non-profit association of members that believes the Internet of Things era is now. Its members include multi-national telecommunication companies, equipment manufacturers, system integrators, sensor manufacturers, entrepreneurial start-ups and semiconductors.

## LORAWAN® – THE NETWORK FOUNDATION OF THE SMART CITY

LoRaWAN® is a Low Power Wide Area Network (LPWAN) specification intended for wireless battery operated devices in regional, national or global networks. It is designed to provide features specifically needed to support low-cost, mobile, secure bidirectional communication for the IoT, including Smart City applications. It is optimized for low power consumption and to support large networks with millions of devices. It has innovative features, supports redundant operations, location, low-power and can even run on energy harvesting technologies enabling the mobility and ease of use to IoT.

Telecommunications companies will need long range, high capacity systems to consolidate the fragmented battery operated wireless market for sensor networks, smart cities, smart metering, security systems, smart home, and industrial controls.



### THE LORA ALLIANCE CHAMPIONS SMART CITY APPLICATIONS IN KEY AREAS, SUCH AS:



LIGHTING



SANITATION



ENERGY



FIRE SECURITY



IRRIGATION



WATER

#### THESE APPLICATIONS ARE DEVELOPED BY INDUSTRY LEADERS, INCLUDING:













## MUELLER — INNOVATIVE SOLUTIONS FOR SMART CITIES

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, making it possible for utilities to deploy newer technology in stages, as their needs and budgets allow.

Adopting LoRa standards enables data from the Mi.Net system to travel faster and farther than before, enabling water utilities to more quickly identify and respond to issues that need to be addressed.



420 Remote Disconnect Meter (RDM) is a fully integrated RDM that enables you to remotely connect and disconnect water services through advanced metering infrastructure (AMI) or from the safety of your vehicles.

# THE MI.NET® SYSTEM'S TWO-WAY METER COMMUNICATION AND CONTROL CAPABILITIES PROVIDE:

- Increased operational efficiencies
- On-demand reads in seconds, not hours
- Tamper and leak notification
- Improved conservation efforts

#### **ABOUT MUELLER**

#### WHERE INTELLIGENCE MEETS INFRASTRUCTURE®

Mueller offers a full line of residential, fire line and commercial meters, AMR / AMI systems and related products. Mueller provides Smart Metering solutions to optimize the delivery and use of water. Municipalities that supply water need innovative ways to increase efficiencies, reduce costs, conserve water and energy, and improve customer service. Mueller's portfolio of metering systems meets that need.

Mueller develops meters and metering systems that are a Smart Move® for the most demanding applications including residential, commercial and fire-line meters, advanced metering infrastructure (AMI) / automated meter reading (AMR) systems and related products.

We provide utilities with infrastructure technology that enables them to access the intelligent, actionable data needed to increase efficiencies, reduce costs, conserve water and energy, and improve customer service.

Mueller Systems is part of Mueller Water Products, Inc., a leading manufacturer and marketer of products and services used in the transmission, distribution and measurement of water.

For more information about Mueller or to view our full line of water products, please visit muellersystems.com or call Mueller customer service at 1.800.423.1323.

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