MI.NET®

a **MUELLER** brand

MI.NET® NODE
Mi.Node LW Meter Interface Unit

FEATURES

Two Way Communications: The Mueller Systems Mi.Node LW (LoRaWAN) meter interface unit provides a direct connection to all Mueller water meters equipped with an encoder register. The primary function of the Mi.Node is to provide full, two way communications between the LoRaWAN Network Provider and the smart meter.

System Components: Information retrieved from a water meter is stored temporarily within the Mi.Node unit's internal memory. As a default, the Mi.Node will transmit hourly meter data at a predetermined time once per day to network. On demand reads to the Mi.Node can been requested at any point in time and are typically delivered within seconds. This data is sent to a LoRa Gateway via an unlicensed radio frequency and then relayed to the Mi.Net host server for analysis and storage. Designed to provide features specifically needed to support low cost, secure bi-directional communications for IoT, including Smart City applications.

Construction: The Mi.Node unit incorporates multiple moisture barriers to eliminate concerns over moisture intrusion even in meter box environments. An o-ring sealed thermoplastic enclosure, coated electronic board and potting compound provide a watertight package that permits Mueller Systems to offer a 20 year warranty on the Mi.Node unit. A large lithium ion battery provides plenty of power over the life of the unit.

Scalable and Upgradable: The Mi.Node's functionality can be upgraded remotely. A firmware upgrade allows the Mi.Node to be upgraded autonomously. All system Mi.Node units can be scheduled for an upgrade at one time and the system will notify the user when the process is complete.

The Mi.Node seamlessly connects directly to the Mueller Remote Disconnect (RDM) meter for easy but secure actuation of the valve through the user interface.

MATERIALS AND SPECIFICATIONS

Class B LoRaWAN compatible for fast response times, on-demand reads in seconds, not hours
Interfaces with water meters that output a protocol similar to the Mueller Systems Solid State Register
Logs and stores meter data in internal memory
RF antenna contained inside Mi.Node unit enclosure
FCC compliant
Mi.Node wire lengths To Mueller register 5′, 25′
Power Output: 1W
Power Source″ D Cell Lithium Battery
Transmit Frequency 902 MHz – 928 MHz
Data Integrity Verified with every data message
Temperature Range: -40°F to + 158°F (-40°C to + 70°C)
Humidity: 0% - 100% condensing
Dimensions 6 ⅝″ high x 2 ¹⁵⁄₁₆″ wide x 3 ⅜″ deep
Automatically detects encoder meter type connected
No external power supply required for operation
Notifies the system of low battery level for preemptive maintenance
Tamper and leak notification

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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