

## Mi.Node W Meter Interface Unit

### Features

**TWO WAY COMMUNICATIONS:** The Mueller Systems Mi.Node W meter interface unit provides a direct connection to all Hersey water meters equipped with a Translator® encoder register. The primary function of the Mi.Node W is to provide full, two way communications between the Mi.Net Mesh/Fixed AMI system and the smart meter.

**SYSTEM COMPONENTS:** Information retrieved from a water meter is stored temporarily within the Mi.Node W unit's internal memory. At a time specified by the system or controlled by the user for an "On Demand" read, the Mi.Node W interface unit will transmit all meter data. This data is sent to a Mi.Gate collector via an unlicensed radio frequency and then relayed to the Mi.Net host server for analysis and storage. All Mi.Node units support the relay of data (Data Hopping) to other Mi.Node units. This allows the Mi.Net system to successfully overcome obstacles encountered in varied and difficult network topographies. Up to four routing options for each Mi.Node unit ensure that the data will be retrieved by the server.

**CONSTRUCTION:** The Mi.Node W 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:** Other Mi.Node modules provide connectivity to gas meters; Mi.Node G, electric meters; Mi.Node E and thermostats; Mi.NodeT, making the Mi.Net AMI system the most flexible and scalable system available. Obtain readings from water, gas and electric meters and transmit the data to a central location for billing and resource management purposes. The Mi.Node will be able to communicate with a thermostat via a wireless connection to control and monitor the thermostat's operation and provide digital information relative to the account's water and energy consumption. Mi.Node W meter interface units are also capable of relaying one way, hourly data received from Mi.Hot Rod meter interface units back to the central Mi.Net system server thereby providing a cost effective migration path for mobile Hot Rod AMR customers who wish to upgrade to AMI. The various models of Mi.Node meter interface units allow the Mi.Net system to provide robust and efficient AMI, water and energy conservation solutions for all types of residential and commercial applications.

The Mi.Node's functionality can be upgraded remotely. A firmware upgrade made over the Mi.Net network 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.



Mi.Node W

### Materials and Specifications

Interfaces with water meters that output a protocol similar to the Mueller Systems Translator
Logs and stores meter data in internal memory
Automatically detects encoder meter type connected
No external power supply required for operation
Notifies the system of low battery level for preemptive maintenance
RF antenna contained inside Mi.Node unit enclosure
FCC compliant
Radio Frequency Operates On 902 To 928Mhz
Mi.Node W Wire Lengths To Translator 3', 15', or 25'
Power Source D Cell Lithium Battery
Typical Range Up To .5 miles
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 6-5/8" high x 2-15/16" wide x 3-3/8" deep

This page intentionally left blank.