

Mi.Node M Integral Meter Mobile/Fixed transceiver

Features

TWO WAY COMMUNICATIONS: The Mueller Systems Mi.Node M meter transceiver provides an integral connection to all Mueller Systems 5/8" through 2" Positive Displacement water meters equipped with an SSR encoder register. The primary function of the Mi.Node transceiver is to provide full, two way communications in either the **Mi.Net** mobile system or fixed network environment.

SYSTEM COMPONENTS: Information retrieved from a water meter is stored temporarily within the Mi.Node transceiver's internal memory. As a default, the Mi.Node transceiver will transmit hourly meter data at a predetermined time once per day to the Mi.Hub collector in fixed network mode and bubble up every 6 seconds to be read via a mobile collector in AMR mode. On demand reads to the Mi.Node transceiver can be requested at any point in time and are typically delivered within seconds in fixed network mode. For fixed network applications, this data is sent to a Mi.Hub collector via an unlicensed radio frequency and then relayed to the **Mi.Net system** host server for analysis and storage. In a mobile application, the data is retrieved by a mobile collection transceiver and that data is then uploaded to the server back at the office. The Mi.Node transceiver utilizes advanced noise filtering technology that allow the Mi.Net system to maximize range while keeping infrastructure to a minimum. Multiple routing options for each Mi.Node transceiver ensure that the data will be retrieved by the server.

CONSTRUCTION: The Mi.Node transceiver 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 transceiver. A large lithium ion battery provides plenty of power over the life of the transceiver.

SCALABLE AND UPGRADABLE: The various models of Mi.Node meter transceivers allow the **Mi.Net** system to provide robust and efficient AMR/AMI, and water conservation solutions for all types of residential and commercial applications.

The Mi.Node transceiver's functionality can be upgraded remotely by issuing a broadcast demand. A firmware upgrade made over the **Mi.Net** system network allows the Mi.Node transceivers to be upgraded autonomously. All system Mi.Node transceivers can be scheduled for an upgrade at one time and the system will notify the user when the process is complete.

The Mi.Node transceiver seamlessly connects directly to the Mueller Remote Disconnect (RDM) meter for easy but secure actuation of the valve through the user interface and can be actuated in the field or through the AMI network.



Integral Mi.Node M Transceiver

Materials and Specifications

Interfaces with most domestic meter manufacturers standard encoded protocol

Logs and stores 105 days of hourly data 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 transceiver enclosure

FCC compliant

Integral Mi.Node M

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 6-5/8" high x 2-15/16" wide x 3-3/8" deep