Mi.Net® M System

Mi.Node M Meter Interface Unit

Mueller SYSTEMS

Features

TWO WAY COMMUNICATIONS: The Mueller Systems Mi.Node M meter interface unit provides a direct connection to all Hersey water meters equipped with an encoder register. The primary function of the Mi.Node interface unit 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 interface unit's internal memory. As a default, the Mi.Node interface unit 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. On demand reads to the Mi.Node interface unit can been requested at any point in time and are typically delivered within seconds. 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 receiver unit and that data is then uploaded to the server back at the office. The Mi.Node interface unit utilizes advanced noise filtering technology that allow the Mi.Net system to maximize range while keeping infrastructure to a minimum. Multiple routing routing options for each Mi.Node interface unit ensure that the data will be retrieved by the server.

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

SCALABLE AND UPGRADABLE: The various models of Mi.Node meter interface units 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 interface unit's functionality can be upgraded remotely by issuing a broadcast demand. A firmware upgrade made over the **Mi.Net** fixed-base system network allows the Mi.Node interface units to be upgraded autonomously. All system Mi.Node interface 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 interface unit 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.

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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 interface unit enclosure
FCC compliant
Mi.Node wire lengths To Translator 5' or 25'
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