

Vision Metering has incorporated LoRa® technology into its Water Metering Unit (MIU). The MIU is a battery operated device utilizing a D Cell 3.6 volt battery. It is encased in a glass filled injection molded polyamide package and then potted to ensure that water cannot infiltrate the package. The antenna is mounted in the cap and also potted to prevent water damage. The Vision MIU uses the same opening as the Sensus module.

The LoRa radio is a Class B transceiver which will transmit between 100 mw and 1 watt (30 db). It has transmission range of approximately 5 + miles provided the gateways are mounted above 60' or higher. It can transmit on any LoRaWAN system provided the system has the appropriate App Keys and DEVEUI. These credentials are provided with every MIU.

The MIU can read any meter with a Sensus® UI-1203 output protocol and can provide any data which the meter can produce. The MIU has successfully connected to Zenner, Badger, Neptune, Kamstrup, Honeywell, Master Meter and Mueller water meters. The MIU can be connected using Nicor connectors or crimp connectors at the user's discretion.

The battery is capable of powering the MIU for 20 years if the module is transmitting 4 times per day (every 6 hours). If a greater frequency of transmissions are required, the battery will support 6 transmissions per day thus providing 15 years of battery life. There is a voltage monitor on the battery and it will send an alarm over the air if the battery voltage drops below 3.2 volts.

The MIUs come from the factory preprogrammed and are ready to install right out of the box. When shipped the MIUs will be transmitting every 6 hours and not stop until the battery is drained. When installing, it is necessary to put the MIU in instantaneous transmit mode with the use of a magnet. Each swipe of the magnet will cause an instant transmission so the installer can check the communication.



MIU and Water Meter Combination



Water MIU installed in a plastic cover



Magnet rebooting MIU to transmit immediately

### Ordering Information

VMW-2-Badger  
VMW-2-Honywell  
VMW-2-Mueller  
VMW-2-Neptune  
VMW-2-Sensus  
VMW-2-Zenner

*These MIUs come without connectors. The wires between the meter and MIU will have to be spliced with outdoor connectors which are included.*

VMW-2NC-Badger  
VMW-2NC-Honeywell  
VMW-2NC-Mueller  
VMW-2NC-Neptune  
VMW-2NC-Sensus  
VMW-2NC-Zenner

*These MIUs will have Nicor Connectors installed.*