

VMW-1 or -2 is a LoRa module for use with water meters equipped with either a pulsed or serial output. - 1 is pulsed input and - 2 is a serial input. The module is self contained and designed to fit into Pit Lids with the Sensus™ opening. The plastic material is UV stabilized polycarbonate.

The LoRa radio is a Class B transceiver with capabilities of transmitting from 100 mw to 1 watt (21 to 30 db). Typical transmission range is 2.5 to 5 miles. If using Vision's electric meters, the message can be repeated through a LoRa equipped electric meter which will extend the range up to 20 miles.

The water modules are programmed using a Sentry 950L. Upon installation, the module will have to be programmed with the water meter reading.

The module can be programmed to transmit hourly load profile data along with the actual meter reading every 4 or 6 hours. To achieve 20 years battery life, 6 hour intervals are recommended.

The LoRa packet can be read by any system that will accept its DevEui (mac address) and App key. A DevEui and App key is provided with every module shipped or in quantity, a data file will be provided.

## BATTERY LIFE

20 years if the module transmits every 6 hours and sends 1 hour interval data for the past 6 hours along with a meter reading.

15 years if the module transmits every 4 hours and sends 1 hour interval data for the past 4 hours along with a meter reading.

The VMW uses a D cell lithium battery delivering 19 ampere hours and is rated for a 20 year life. The battery and electronics are encapsulated in a non hardening gel so no stress is placed on the battery or PCB.

There is an onboard voltage circuit that will provide a low battery indicator which is transmitted back to the head end software when the battery voltage reaches a certain threshold.



Dimensions: 6 1/2" Long 1 3/4" Diameter tube,  
Top 4" diameter, 5" protruding from bottom of pit lid

