



The M2 Water Meter Radio Transceiver provides a flexible function to detect backflow conditions. The function accommodates the resolution of the encoded register to eliminate false triggers due to register jitter.

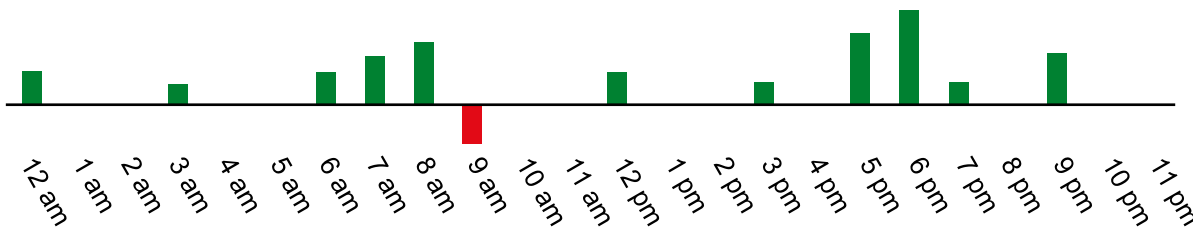
## Description

The backflow function simply monitors consumption and checks for any period where negative consumption occurs. This function only works for encoded registers.

The configurable backflow trigger quantity is typically set at 2X the encoder value to eliminate false backflow flags due to register jitter. Register jitter is where the encoder wheels are at an uncertain position between a rollover from nine to zero. In this scenario, the radio interprets the encoder as moving backward and then forward repeatedly. True backflow occurs when pressure conditions cause water to move backward through the meter.

**Set Backflow Trigger Level**  
- Quantity of backflow water to trigger flag

Negative consumption (over trigger level) on any query/log interval causes flag to be SET.



## Operation

The radio monitors consumption continually. If the backflow conditions are met, the radio sets a flag indicating the condition and transmits the flag with every transmission. The G2 Mobile System displays an icon for the meter indicating the backflow and also passes this information to the Data Center or the billing system. A datalog can be downloaded showing the consumption pattern that caused the flag.

Measurement

Notification

Analysis



Activity Window  
ID = 46482  
Serial = 49057  
Status Byte = 06  
Meter Strength = 32

Account Information  
Account = HERNDENSON, WILLI  
Meter ID = 46482  
Address = 4588 San Miguel  
Location =  
Meter Size =  
Code = 08  
Consumption Error = False  
Lock Detection = False  
Conservation Flag = True  
Backflow Detect = False  
Zero Detect = False  
Low Battery = False  
Encoder Full = False

Meter Reading Status  
Total Meters in Database = 4656  
Total Meters Read = 4230 = 92%  
Total Meters Remaining = 371

