

INTRODUCTION

When considering the use of a wireless device, care should be taken to properly qualify potential sites. As with most projects, having the right tools makes all the difference. This is where the 350EV Wireless Evaluation Kit comes into play. The Badger 350EV kit consists of a portable, battery-powered 350R radio frequency (RF) receiver and a 350T RF transmitter. The 350R is mounted in a weatherproof enclosure and is serialized to "listen" to the 350T. This evaluation kit makes it possible to understand how buildings, parking lots and ground features unique to every application affect signal transmission. Using this information can help determine optimal wireless application locations. A typical site evaluation would involve placing the RF transmitter at the desired flow sensor location and the RF receiver where the output signal is necessary. Signal reception would be confirmed by viewing the "RF RCV" LED on the receiver which should flash approximately every 4 seconds. If the testing area allows, it is good practice to test the RF receiver at an additional range of 10 feet to ensure the wireless signal is not borderline in strength and to account for a changing signal environment, e.g. tree and bush growth, vehicle traffic, etc.

WIRELESS ORION RF RECEIVER

The ORION receiver is powered using a 9V battery and installed in a NEMA 4X enclosure complete with on/off switch and low profile antenna. Wireless communication with the RF transmitter is confirmed by viewing the "RF RCV" LED near the D.I.C. Comm Port which should flash approximately every 4 seconds.

WIRELESS ORION RF TRANSMITTER

The ORION transmitter operates in the 902-928 MHz frequency band at 916.45 MHz, which requires no FCC licensing. The transmitter sends a fixed value RF signal to the serialized receiver approximately every 4 seconds. The transmitter is powered using an internal lithium battery and is encapsulated to ensure moisture resistance. It is factory programmed and requires no configuration in the field. A transmitter mounting kit consisting of a threaded cap and nut is supplied with the kit and can be used to install the transmitter in a valve box cover for testing, if required.



Location of "RF RCV" LED.
This LED can be seen through
the lid overlay.

OPERATING INSTRUCTIONS:

1. Turn power switch to "ON" position.
2. "RF RCV" LED will flash twice to confirm power is "ON"
3. "RF RCV" LED will flash approximately every four seconds when transmitter and receiver are communicating.
4. When "RF RCV" LED stops flashing, transmitter is out of range
5. Turn power switch to "OFF" position when test is completed

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Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding contractual obligation exists.



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