

CITY OF PAPIILLION

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ATTENTION:

The City of Papillion has modified the requirements for residential water meter endpoint installation. Formerly, a dovetail mounting kit was utilized to mount the water meter endpoint module to an inside wall or floor joist inside the basement. The new installation method will be to mount the endpoint module to the exterior of the structure with the included wall cover install kit. There is no increase to the cost of the meter.

Commercial installation can utilize internal mounts when water closets are above grade or approved by meter technician.

The provided meter package includes 25-ft of cable from the meter register where the endpoint module can connect (additional extensions available from the Public Works Department upon request). This cable shall be installed through the structure wall to install the endpoint module on the outside of the residence. The final positioning of the endpoint module mount on the exterior of the structure is flexible, but it is required that the mount be placed in a way that it can be accessed by personnel, at least 1-ft above grade, and near other exterior utility meters and boxes when possible.

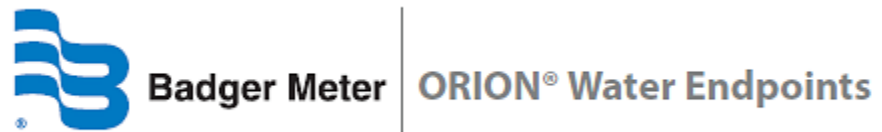
This new installation method is effective immediately for single-family residences only. Businesses and multi-family units are not required to install the endpoint module on the exterior but may choose to install the endpoint on the exterior to improve access and signal.

All meters now come standard with the wall mount kit. Business or Multi-family units can use this same kit to install on an interior wall. See attached for the installation manual for the wall mount. We will also provide this manual with the new meters upon pick-up.

Respectfully Submitted,

Alex Evans, P.E.

Deputy City Engineer



## **Water Meter Endpoint; Exterior Mount Installation Manual**

## TWIST TIGHT CONNECTION; DISCONNECT/INSTALL

**Twist tight wire** disconnection will need to happen in order to run the meter wire to the exterior for mounting of the meter endpoint.

To install endpoint to the exterior of the property, follow these steps.

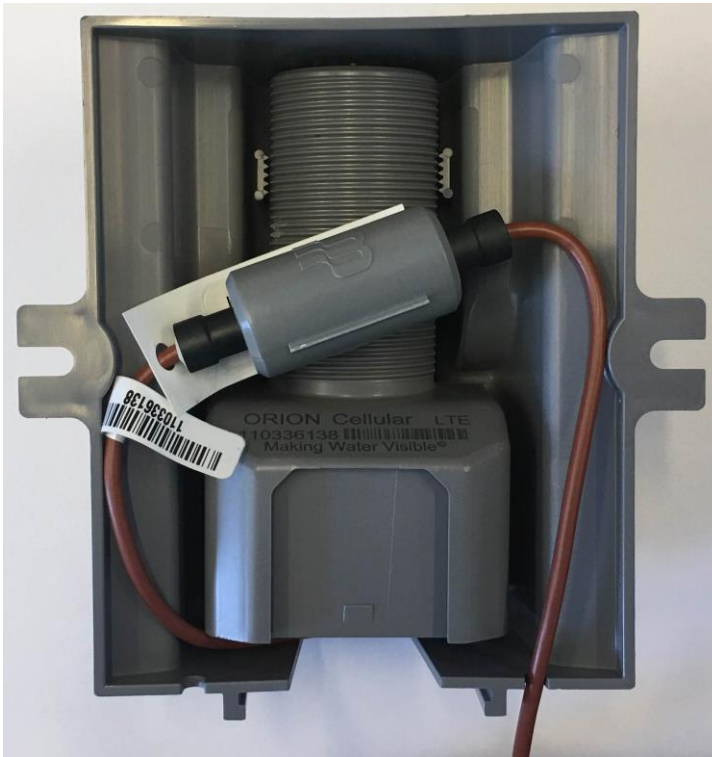
1. Carefully open the security cover with a thin blade to access the twist tight connection.
2. Disconnect the twist tight connection and run the wire to the exterior where it will be reconnected.



3. Reconnect the twist tight connection and cover with the security cover.



Endpoint should look similar to the image below before being mounted to the exterior.



Follow WALL COVER INSTALL KIT for installation of the wall cover.

## 64394-032 WALL COVER INSTALL KIT

**Wall Cover Install Kit PN: 64394-032** is recommended for proper mounting of an endpoint for indoor and outdoor remote applications, and is designed to provide an environmentally protected area for gel splice connections (if needed). Outside dimensions are shown in [Figure 9](#).

**For use with:** All ORION endpoints



Figure 8: 64394-032 wall cover enclosure

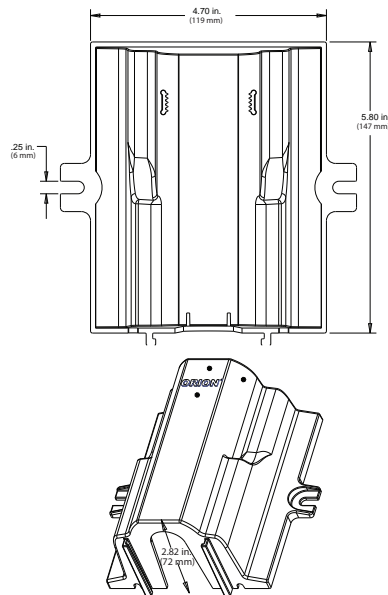


Figure 9: 64394-032 Outside dimensions

To install an ORION endpoint, follow these steps.

1. Choose an appropriate installation location within the limits of the endpoint cable/connector harness.
2. Verify the proper orientation ([Figure 10](#)). The bottom of the enclosure has an opening for IR programming. The opening gives access to the endpoint IR LED port ([Figure 13](#) and [Figure 14](#)) without having to disassemble the unit.
3. Place the endpoint into the wall cover enclosure, antenna (threaded portion) up.

**Cellular LTE-M, LTE endpoints:** [Figure 10](#) shows the correct endpoint placement.

**All other ORION endpoints:** Make sure the flat side of the endpoint faces in and fits up against the inside wall of the enclosure.

- NOTE:** If double-sided tape is included in the kit, you can use the tape to temporarily secure the endpoint inside the enclosure before mounting.
4. Position the endpoint cable.
    - Route the endpoint cable through the cutout on the bottom of the wall cover.

**NOTE:** If you are drilling a hole through the wall behind the enclosure for the endpoint cable, the cable does not need to route through the cutout at the bottom.

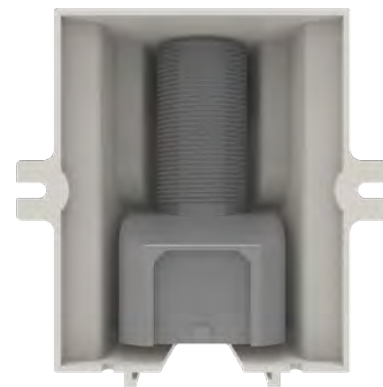


Figure 10: ORION Cellular LTE endpoint orientation

- If the endpoint has an in-line connector, place the connector *inside* with the endpoint and route the connector cable through the cutout on the bottom.

**NOTE:** If used, place gel splice connections inside the enclosure.

**NOTE:** See "[Outdoor Installation for Endpoint with In-line Connector](#)" on [page 16](#) for additional information about installing the endpoint outdoors with the wall cover enclosure.

5. Make sure the wall cover is properly positioned, with the endpoint antenna straight up and the endpoint IR LED port visible through the bottom opening.
6. Secure the wall cover using customer-supplied screws.  
Installation is complete.



Figure 11: 64394-032 installation complete

## 67625-001 IR Holder for Wall Cover Install Kit

**IR Holder for Wall Cover Install Kit (PN: 67625-001)** is an optional part which can be ordered for use with the Wall Cover install kit (**64394-032**). The IR holder bracket fits on the wall cover adapter rails to hold an IR programming head in place.

1. Place the optical head of an IR programming cable into the holder. The nubs on the optical head fit into the cutouts on the holder.



(PN: 67625-001) IR holder bracket



Optical head of the IR programming cable



Optical head in the bracket

Figure 12: IR holder and programming cable optical head

2. Slide the bracket into the adapter rails at the bottom of the wall cover enclosure (64394-032) so the IR optical head is aligned with the endpoint LED port. See [Figure 13](#) and [Figure 14](#).
3. Connect the IR programming cable to a Badger Meter mobile reading device to perform IR functions. Refer to the mobile reading device user manual for IR programming instructions.



Figure 13: IR LED port ORION Cellular LTE endpoint (bottom up view)



Figure 14: IR LED port ORION ME endpoint (bottom up view)