

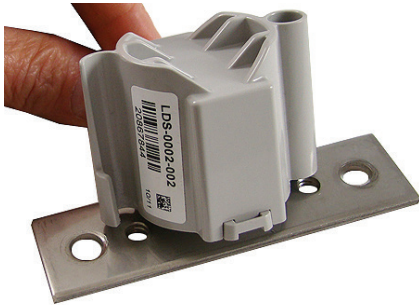
To install the Leak Sensor on a pipe (up to 2 1/2-inch OD)

1. Select a Leak Sensor mounting location within 5 feet of the ERT module.

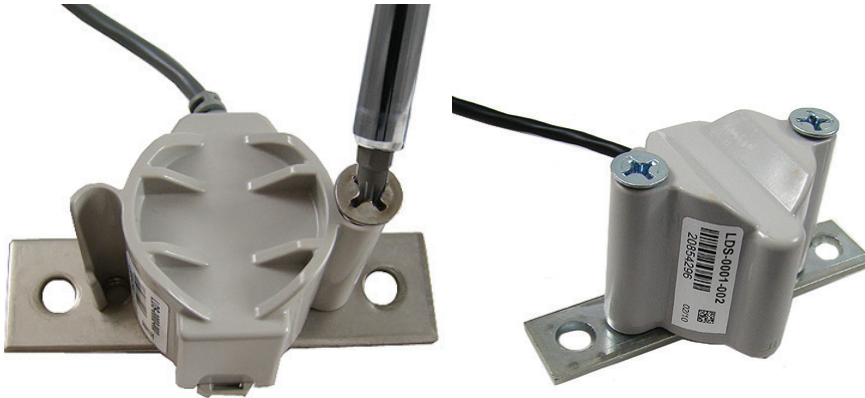
Note Leak Sensor mounting orientation is not critical. Orient the sensor to best accommodate your installation. The most important installation practice is to fasten the sensor securely to the pipe.

Caution Mount the Leak Sensor on the water input side of the meter. Failure to follow this mounting requirement could result in errors in the leak detection data. Installation requires Itron mounting hardware. Repair costs and service charges relating to the use on non-compliant mounting hardware will be charged to the customer. Contact Itron Support for more information.

2. Insert the mounting plate screws into the holes on the Leak Sensor's curved surface.



3. Secure the mounting plate to the Leak Sensor.



4. Verify the pipe's mounting surface is free from dirt and debris. Place the curved surface of the LS against the pipe.

Caution Do not mount the Leak Sensor on a pipe coupler, joint, or nut.

5. Insert the U-bolt around the pipe and into the holes in the plate/Leak Sensor assembly. Secure the U-bolt with the wing nuts. Tighten the wing nuts until snug (to a minimum of 5-inch pounds) to prevent device rotation on the pipe. After the second wing nut is tightened, check the Leak Sensor to verify the device is snug. If the sensor moves, tighten the wing nuts until there is no movement.



Caution Do not tighten the Leak Sensor to more than 20 inch-pounds. Over-tightening could damage the Leak Sensor housing and/or the pipe.

Optional Direct Connect Remote Antenna Installation

The optional 900 MHz remote mount antenna provides increased RF range coverage for the listed mobile applications where the meters are located deep in a pit boxes.

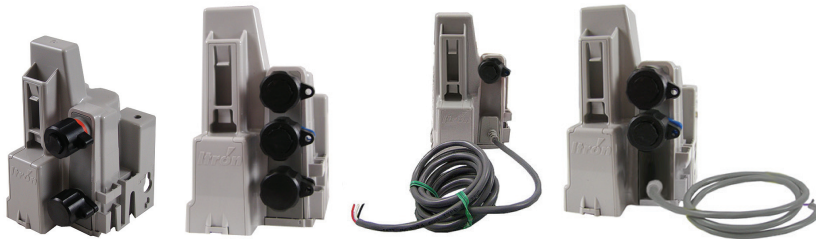
This section provides antenna mounting instructions through a pit lid and the instructions to connect the optional antenna to the ERT module.



Caution Only remote antenna ERT modules can be used with the remote antenna. See the following table for 100W and 100WP remote antenna ERT models.

100W and 100WP ERT Module Models for use with Remote Antennas

100W and 100WP ERT Module Description	Iron Part Number
100W+ encoder ERT module with optional remote antenna and register integral connectors	ERW-1300-202
100W+ encoder ERT module with optional remote antenna and register integral connectors, ISM	ERW-1300-302
100W encoder ERT module with optional remote antenna, Leak Sensor, and register integral connectors	ERW-1300-203
100W+ encoder ERT module with optional remote antenna, Leak Sensor, and register integral connectors, ISM	ERW-1300-303
100W 5-ft. flying leads encoder ERT module with optional remote antenna integral connector	ERW-1300-205
100W+ 5-ft. flying leads encoder ERT module with optional remote antenna integral connector, ISM	ERW-1300-305
100W 5-ft. flying leads encoder ERT module with optional remote antenna and Leak Sensor connectors	ERW-1300-206
100W+ 5-ft. flying leads encoder ERT module with optional remote antenna and Leak Sensor connectors, ISM	ERW-1300-306
100W 20 in. flying leads encoder ERT module with optional remote antenna integral connector	ERW-1300-217
100W+ 20 in. flying leads encoder ERT module with optional remote antenna integral connector, ISM	ERW-1300-317
100WP 20 in. flying leads encoder ERT module with optional remote antenna and Leak Sensor integral connectors	ERW-1300-218
100WP+ 20 in. flying leads encoder ERT module with optional remote antenna and Leak Sensor integral connectors, ISM	ERW-1300-318
100WP pulser ERT module with optional remote antenna and register integral connectors	ERW-1300-208
100WP+ pulser ERT module with optional remote antenna and register integral connectors, ISM	ERW-1300-308
100WP pulser ERT module with optional remote antenna, Leak Sensor, and register integral connectors	ERW-1300-209
100WP+ pulser ERT module with optional remote antenna, Leak Sensor, and register integral connectors, ISM	ERW-1300-309
100WP 5-ft. flying leads pulser ERT module with optional remote antenna and Leak Sensor integral connectors	ERW-1300-212
100WP+ 5-ft. flying leads pulser ERT module with optional remote antenna and Leak Sensor integral connectors, ISM	ERW-1300-312
100WP 20 in. flying leads pulser ERT module with optional remote antenna integral connector	ERW-1300-219
100WP+ 20 in. flying leads pulser ERT module with optional remote antenna integral connector, ISM	ERW-1300-319
100WP 20 in. flying leads pulser ERT module with optional remote antenna and Leak Sensor integral connectors	ERW-1300-220
100WP+ 20 in. flying leads pulser ERT module with optional remote antenna and Leak Sensor integral connectors, ISM	ERW-1300-320



Industry Canada Conformity

This radio transmitter (IC:864D-100WC) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (IC: 864D-100WC) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Specification

Part number	CFG-0900-003
Gain	2 dBi
Horizontal beamwidth	Omni-directional
Impedance	50 ohms
Termination	Proprietary

Installing the Remote Antenna

Metal lids on water pit boxes require a through-lid solution for optimal ERT module radio performance. The remote antenna is designed to fit in a pit lid hole with a diameter of 3/4-inch and lid thicknesses from 1/4-inch to 1-3/4-inch.



Caution Remove cable or twist ties from the antenna cable to prevent damage to the ERT module or antenna.

To install the remote antenna through a pit lid

1. Thread the remote antenna connector and cable through the pit lid hole. Verify the antenna's convex surface is on the top of the pit lid. (These instructions show a simulated pit lid material.)



2. Insert the antenna connector through the rectangular opening in the threaded collar.

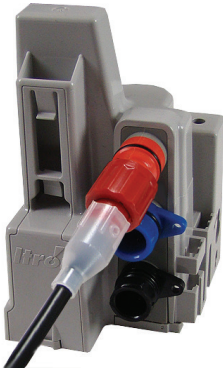


3. Turn the threaded collar until it is tight against bottom of the pit lid.

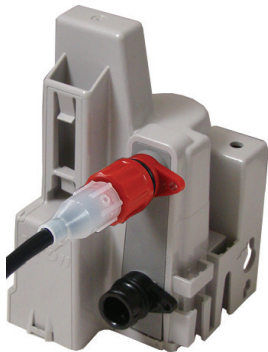


To connect the remote antenna to the ERT module

1. Align the connector pins with the top, red connector on the ERT module. The illustration shows a 3-port ERT module connection.

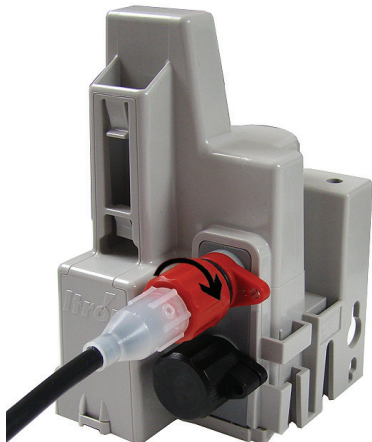


2. Push in the antenna connector to complete the connection. The illustration shows a two-port ERT module connection.



3. Turn the connector lock ring to the right to secure the connection.

Caution Turn the connector lock-ring only. Do not twist the completed connection. Twisting the connection could damage the ERT module or antenna connector pins.



4. Follow the [Rod Mount Installation](#) on page 14 or [Wall Mount Installation](#) on page 17 instructions to mount the ERT module.

Remote antenna installation is complete.

