

Natural Gas Solutions

100G Datalogging FN ERT Module Installation Guide - Remote Mount

Identification

100G Datalogging FN ERT Module Installation Guide - Remote Mount

01/10/2011 TDC-0824-003

100G Remote Mount ERT Module part numbers: ERG-5000-501, ERG-5000-502, ERG-5000-503

100G Datalogging Remote Mount ERT Module: ERG-5002-501, ERG-5002-502, ERG-5002-503, ERG-5002-505

100G Datalogging FN Remote Mount ERT Module: ERG-5003-501, ERG-5003-502, ERG-5003-503, ERG-5003-505

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Applicable Patents

U.S. Patent Numbers: 4,614,945; 4,753,169; 4,768,903; 4,799,059; 4,867,700

Canadian Patent Numbers: 1,254,949; 1,267,936; 1,282,118

Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation of this device is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference that may cause undesirable operation.

This device must be permanently mounted such that it retains a distance of 20 centimeters (7.9 inches) from all persons in order to comply with FCC RF exposure levels.

Compliance Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Déclaration de conformité

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Transportation Classification

The Federal Aviation Administration prohibits operating transmitters and receivers on all commercial aircraft. When powered, the 100G Datalogging FN remote ERT module is considered an operating transmitter and receiver and cannot be shipped by air. All product returns must be shipped by ground transportation.

Modifications and Repairs

To ensure system performance, this device and antenna shall not be changed or modified without the expressed approval of Itron. Any unauthorized modification will void the user's authority to operate the equipment.

Meter Installation/Removal

In the event of malfunction, all repairs should be performed by Itron. It is the responsibility of users requiring service to report the need for service to Itron.



Warning Follow these procedures to avoid injury to yourself or others:

- The lithium battery may cause a fire or chemical burn if it is not disposed of properly.
- Do not recharge, disassemble, heat above 100° Celsius (212° Fahrenheit), crush, expose to water, or incinerate the lithium battery. Fire, explosion, and severe burn hazard.
- Keep the lithium battery away from children.
- Replace the lithium battery only with batteries meeting Itron specifications. Any other battery may cause a fire or explosion.



Warning Only authorized Itron personnel should attempt repairs on Itron equipment. Attempts to do so by others might void any maintenance contract with your company. Unauthorized service personnel might also be subject to shock hazard on some Itron equipment if removal of protective covers is attempted.



Warning To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing.



Warning Substitution of components may impair intrinsic safety.

Suggestions

If you have comments or suggestions on how we may improve this documentation, send them to TechnicalCommunicationsManager@itron.com

If you have questions or comments about the software or hardware product, contact Itron Technical Support:

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Before You Begin

The following documentation conventions are used:



Caution A Caution warns the user that failure to heed the information in the note could result in loss of data. Be sure to carefully read a Caution note and follow the advice/instructions.



Warning A Warning alerts you about potential physical harm to the user or hardware. It is critical that you pay strict attention to Warning notes, read the information carefully, and follow the advice/instructions.



Tip A Note provides the user with extra hints to make a task easier to perform or a concept easier to understand.



Note A Note supplies generic information to the user. The user could ignore the information and continue a task without suffering any adverse consequences.

Document Purpose

This installation guide provides step-by-step instructions for installing the 100G Series remote gas ERT module on a wide variety of meters and instruments. This installation guide refers to the 100G series remote ERT module as the 100G Datalogging FN remote ERT module. Mechanical and electrical installation procedures are similar for all modules. 100G Datalogging FN remote ERT module compatible meters and instruments are listed in the [100G Datalogging FN Remote ERT Module Meter Compatibility List](#) on page 3.

100G Datalogging FN ERT Module

Itron 100G series remote ERT modules are radio-frequency (RF) devices designed to transmit meter data to an RF meter reading device within transmission distance of the remote ERT module. The 100G remote gas ERT module was designed with a higher output power than earlier Itron remote gas ERT modules to achieve an increased RF transmission distance. The 100G series remote gas ERT modules have greater output power to meet Itron mobile and fixed network requirements. The first 100G remote gas ERT module offered high transmit power capability which increased operational efficiency and reduced infrastructure costs. The 100G Datalogging remote gas ERT module offers high transmit power with data logging capability (time-stamped hourly interval data) for both mobile and fixed network applications. Itron's 100G Datalogging Fixed Network (DLN) remote gas ERT module adds improved network performance through even higher transmit power, accomplished using increased antenna efficiency and more robust optimized messaging structures.

The 100G Datalogging FN remote ERT module features tilt-tamper and cut cable-tamper reporting and security seals to indicate physical tampering and minimize theft. Cut cable is reported when the cable is cut or disconnected from the meter, instrument, or endpoint. 100G Datalogging FN remote ERT module circuitry senses an electrical current *break* to report a cut cable tamper event.

Transmission Modes

The 100G Datalogging FN remote ERT module can be set to transmit in Fixed Network, Mobile and Handheld, or Hard to Read Mobile and Handheld Mode.

- **Fixed Network Mode.** The 100G Datalogging FN remote gas ERT transmits a high-powered network interval message (NIM) RF message every five minutes. Output power in this mode is 500 milliwatts or +27 dBm. Interspersed in the high power NIM, the 100G Datalogging FN remote ERT module transmits a medium power RF message at 10 milliwatts or +10 dBm; expected battery life is 20 years.
- **Mobile High Power Mode.** The 100G series remote gas ERT transmits a high-powered RF message every 60 seconds. Output power in this mode is 250 milliwatts or +24dbm; expected battery life is 20 years.
- **Mobile and Handheld Mode.** The 100G series remote gas ERT transmits a medium-powered RF message every 15 seconds. Output power in this mode is 10 milliwatts or +10dBm; expected battery life is 20 years.
- **(Optional) Hard to Read Mobile and Handheld Mode.** The 100G series remote FN gas module transmits a high-powered RF message every 30 seconds. Output power in this mode is 250 milliwatts or +24dBm; expected battery life decreases to 15 years in this mode. The *Hard to Read Mobile and Handheld Mode* should only be used for exceptionally hard-to-read applications (such as meters installed on roof tops or in sub-basements).

An FCC license is not required to read 100G series remote gas ERT modules.

Specifications

The functional and operational specifications for the 100G Datalogging FN remote ERT module are listed below.

Functional Specifications	Description
Power source	Two "A" cell lithium batteries
Tamper detection	Tilt tamper and cut cable tamper
FCC compliance	Part 15 certified
Industry Canada compliance	RSS-210 certified
Intrinsically safe per	UL Class I, Division 1, Groups C and D
Product identification	Numeric and bar-coded ERT module type and serial number
Construction materials	Gray polycarbonate housing and back plate with encapsulated electronics
Operational Specifications	Description
Operating temperatures	-40° to 158° F (-40° to +70° C)
Operating humidity	5 to 95 percent relative humidity
Program frequency	908 MHz
Transmit frequency	Spread spectrum 908 to 924 MHz ISM band
Data integrity	Verified in every data message

Related Documents

Document Title	Document Part Number
<i>Gas Endpoint Meter Compatibility List</i>	PUB-0117-002
<i>Gas Endpoint Ordering Guide</i>	PUB-0117-001
<i>100G Datalogging Specification Sheet</i>	Publication 100941SP-XX
<i>Endpoint Link Programming Guide</i>	TDC-0744*
<i>Field Deployment Manager Endpoint Tools Mobile Application Guide</i>	TDC-0934*
<i>Field Deployment Manager Field Representative's Guide</i>	TDC-0936*

*The last three digits of the user and installation guides represent the document's revision level. The revision level is subject to change without notice.

100G Datalogging FN Remote ERT Module Meter Compatibility List

This table lists meters compatible with the 100G Datalogging FN remote ERT module. Due to continuous research, product improvements, and enhancements Itron reserves the right to change this list without notice.

Meter	Model	Description	Class	Comments	ERT Module Type	ERT Module Part Number
Elster/American/ Canadian	10 Metric (10B)	Iron case	Residential	2.5' cable with encoder	100G Remote 100G Datalogging Remote 100G Datalogging FN Remote	ERG-5000-501 ERG-5002-501 ERG-5003-501
Sensus/Invensys	Sonix 12,16,25,57, 600,880,2000	Pulser Metric Cubic foot	Commercial	12" lead wires	100G Remote 100G Datalogging Remote 100G Datalogging FN Remote	ERG-5000-503 ERG-5002-503 ERG-5003-503
National/ Lancaster	All meters	Where direct mount is not compatible	Residential	2.5' cable with encoder	100G Remote 100G Datalogging Remote 100G Datalogging FN Remote	ERG-5000-501 ERG-5002-501 ERG-5003-501
Itron/Actaris/ Schlumberger/ Sprague	1A	Where direct mount is not compatible	Residential	2.5' cable with encoder	100G Remote 100G Datalogging Remote 100G Datalogging FN Remote	ERG-5000-501 ERG-5002-501 ERG-5003-501
Itron/Actaris/ Schlumberger/ Sprague	Metris 250	Straight Face meter	Residential	2.5' cable with encoder	100G Remote 100G Datalogging Remote 100G Datalogging FN Remote	ERG-5000-501 ERG-5002-501 ERG-5003-501
Itron/Actaris/ Schlumberger/ Sprague	305	#2 flat-face meter		2.5' cable with encoder	100G Remote 100G Datalogging Remote 100G Datalogging FN Remote	ERG-5000-501 ERG-5002-501 ERG-5003-501
Itron/Actaris/ Schlumberger/ Sprague	400	#3 flat-face meter		2.5' cable with encoder	100G Remote 100G Datalogging Remote 100G Datalogging FN Remote	ERG-5000-501 ERG-5002-501 ERG-5003-501
Itron/Actaris/ Schlumberger/ Sprague	675, 1000	Front mount index	Commercial	2.5' cable with encoder Also requires thicker gasket for magnet hub to clear index box. 1-hole gasket: FAB-0014-001 2-hole gasket: FAB-0014-002 4-hole gasket: FAB-0014-003	100G Remote 100G Datalogging Remote 100G Datalogging FN Remote	ERG-5000-501 ERG-5002-501 ERG-5003-501
Elster American	TC and STD CTR	American RPM series rotary meters including TC and non-TC.	Commercial	Meter must have a factory installed pulser with connector output. Purchase endpoint from Itron and correct cable interface from appropriate meter manufacturer.	100G Remote (12' lead wires) 100G Datalogging Remote (12" lead wires) 100G Datalogging FN Remote (12" lead wires)	ERG-5000-503 ERG-5002-503 ERG-5003-503
Romet	STD CTR 600 through 56000 TC 2000 through 23000	RM series	Commercial	Meter must have a factory installed pulser with connector output. Purchase endpoint from Itron and correct cable interface from appropriate meter manufacturer.	100G Remote (12' lead wires) 100G Datalogging Remote (12" lead wires) 100G Datalogging FN Remote (12" lead wires)	ERG-5000-503 ERG-5002-503 ERG-5003-503

Meter	Model	Description	Class	Comments	ERT Module Type	ERT Module Part Number
Romet	RM Series	ECM2 Electronically compensated meter	Commercial	Meter must have connector pin with factory-installed pulse output. Purchase endpoint from Itron and correct cable interface from Romet. ECM2 must be configured for 750ms "off-time" between pulses. The ECM2 must have firmware version J or later.	100G Datalogging Remote (12" lead wires) 100G Datalogging FN Remote (12" lead wires)	ERG-5002-503 ERG-5003-503
Dresser ROOTS®	B3/LMMA	Dresser ROOTS® rotary meters equipped with WeigandWire solid state pulsers	Commercial	Meter must have factory-installed pulser with connector output. Purchase endpoint from Itron and correct cable interface from Dresser. Dresser pulser must be version 17 or higher to be compatible.	100G Remote (12" lead wires) 100G Datalogging Remote (12" lead wires) 100G Datalogging FN Remote (12" lead wires)	ERG-5000-503 ERG-5002-503 ERG-5003-503
Dresser ROOTS®	IMC/W2 MC2	Dresser ROOTS® Micro Correctors	Commercial	Endpoint compatible with IMC/W2 firmware version 1.93 or earlier. Pulse width must be set for 125ms. Pulse output must be at 100CF(CM) or higher.	100G Datalogging Remote (12" lead wires) 100G Datalogging FN Remote (12" lead wires)	ERG-5002-505 ERG-5003-505
Itron/Actaris	DATTUS fM2/fM3		Commercial	For all meter types, pulse width must be set to .050 seconds. Meter type 11M or smaller must have pulse weight minimum of 10 cubic feet or 1 cubic meter. Meter type 16M or greater must have pulse weight minimum of 100 cubic feet or 1 cubic meter.	100G Datalogging Remote (5' cable) 100G Datalogging FN Remote (5' cable)	ERG-5002-502 ERG-5003-502
Mercury Instruments	EC-AT Mini-P Mini-AT Mini-Max	Pressure and temperature electronic volume correctors	Commercial	Correctors must have a Form A board; Form C is NOT supported. Item #056 Pulse Scaling Factor must be set to 2.0. Item #096 Cor Vol Display must be set at 1, 2, 3, or 4 blanks. endpoint does NOT support a setting of 0 blanks. Item #115 Output Pulse Code must be set at 1, 2, 3, or 4. endpoint does NOT support an Output Pulse Code of 0.	100G Remote (5' cable) 100G Datalogging Remote (5' cable) 100G Datalogging FN Remote (5' cable)	ERG-5000-502 ERG-5002-502 ERG-5003-502
Mercury Instruments	TCI	Temperature Compensating Index	Commercial	Correctors must have a Form A board, Form C is NOT supported. Item #56 Pulse Scaling Factor must be 2.0. Item #96 must be 7, 6, 5, or 4 digits (1, 2, 3, & 4 blanks). Endpoint does NOT support 8 digits (0 blanks). Item # 1014 set to the preset "Itron" selection in the drop down menu. Compatible firmware versions on TCI are 1.06, 1.07, and 1.10.	100G Datalogging Remote (5' cable) 100G Datalogging Remote (12" lead wires) 100G Datalogging FN Remote (5' cable) 100G Datalogging FN Remote (12" lead wires)	5': ERG-5002-502 12": ERG-5002-503 ERG-5003-502 ERG-5003-503

Installation Prerequisites

The following tools are required to install, program, and check the 100G Datalogging FN remote ERT module. Some specific tools may be required dependent on meter or instrument type.

- Medium flat-blade screwdriver
- Small flat-blade screwdriver
- Medium Phillips screwdriver
- Hand pliers
- Side-cutting pliers
- 1/4-inch nut driver or similar blunt tool
- One-inch width putty knife
- Adjustable wrench
- 3M Scotchlock E-9Y crimping tool, 3M Scotchlock E-9C cartridge tool, or similar crimping tool
- All-weather electrical tape
- Size T-10 Torx screwdriver
- Itron programming device to program and check 100G Datalogging FN remote gas ERT module installation and operation:

FC200SR handheld computer with Endpoint-Link or Endpoint-Link Pro software version 5.3 or higher or Field Deployment Manager (FDM) software version 1.1 or higher

or

FC300 with SRead with Endpoint-Link or Endpoint Link Pro version 5.5 or higher or Field Deployment Manager (FDM) software version 1.1 or higher

or

900 MHz Belt Clip Radio with Endpoint-Link version 5.5 or higher or Field Deployment Manager (FDM) software version 1.1 or higher and a customer-supplied laptop



Note Reference the appropriate programming guide or specification sheet for correct software version (see [Related Documents](#) on page 2).

Mounting the 100G Datalogging FN Remote ERT Module

This chapter provides the instructions to mount the 100G Datalogging FN remote ERT module on a pipe or other flat vertical surface (wall).

Installation Options

Mount the 100G Datalogging FN remote ERT module using the Pipe Mount or Wall Mount (Flat Surface) procedure.

- **Pipe Mount.** Pipe mounting is used in conjunction with the Remote Mount Kit (Itron part number CFG-0005-003). The pipe mount option places the ERT module on a pipe near the meter or instrument (not on a wall surface). This option requires a meter manufacturer's cable to connect the ERT module to the meter or instrument.
- **Flat Vertical (Wall) Mount.** Installation using the wall mount option places the ERT module on a wall or other vertical surface. A cable connects the ERT module to the meter or instrument.

Mounting Screw Specifications

Application	Itron Part Number		Description
To mount adapter plates on pipe brackets	575-9930-016		8-16 x 1/2-inch length, Type 8 slotted pan-head tapping screw - corrosion-resistant steel
To mount remote ERT modules on adapter plates	575-9930-032		8-16 x 1-inch Type 8, slotted pan-head tapping screw, corrosion-resistant steel
To mount remote ERT modules on sheet metal surfaces (to mount ERT modules to wood surfaces, a comparable wood screw is required)	SCR-0009-001		10-16 x 1 1/2-inch Type AB thread for sheet metal, Phillips pan-head tapping screw, corrosion-resistant steel

Mounting Installation Considerations

Select a proper mounting location. Itron recommends mounting the 100G Datalogging FN remote ERT module in close proximity to the meter or instrument. Some applications may require an extended cable-length. The 100G Datalogging FN remote ERT module supports cable lengths up to 300 feet.

Mount the 100G Datalogging FN remote ERT module in a vertical position with the ERT module label directional arrow pointed upward.



Caution Upright vertical positioning is very important because:

- 100G Datalogging FN remote gas modules are designed with the antenna in a vertical direction so the antenna is parallel to the reading device (which has a vertical antenna). Matching antenna polarity can greatly affect RF performance and enable easy ERT module reading.
- 100G Datalogging FN remote gas modules are designed so the tilt tamper is vertical. It is important to maintain vertical positioning in the field to enable tilt tamper stability.



Warning Do not mount the 100G Datalogging FN remote ERT module in an orientation other than vertical (remote ERT module label arrow pointed upward or downward). Violating the mounting orientation requirements will void the product warranty.

Mounting the Remote ERT Module on a Pipe

The following items are required to mount the 100G Datalogging FN remote ERT module on a pipe or vertical flat surface (wall):

Itron Part Number	Description	
ERG-5003-501 ERG-5003-502 ERG-5003-503 ERG-5003-505	100G Datalogging FN Remote ERT Module	 (ERG-5003-501 shown)
CFG-0005-003	Remote Mount Installation Kit Kit includes: • 2 band clamps • 2 tamper seals • pipe bracket • cable ties • adapter plate Screws: • (2) 1/2-inch - to attach the adapter plate to pipe bracket • (2) 1-inch - to attach the ERT module to the adapter plate • (3) 1 1/2-inch - to attach the ERT module to a vertical surface (wall)	



Warning Install the 100G Datalogging FN remote ERT module in an upright position. Any position other than upright can negatively affect radio performance and potentially reduce battery life.

To mount the pipe bracket on a vertical pipe



Caution Vertical mounting position is important to maximize RF performance. Mount the 100G Datalogging FN remote ERT module with the module's label arrow pointing up. *The module's arrow must never point to either side or upside down.* The module's tilt tamper functionality is designed to operate with the module installed vertically.

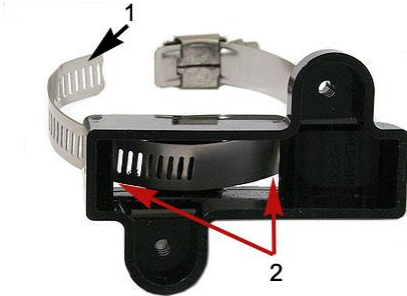
1. Remove the pipe bracket and band clamp from the Remote Mount Installation Kit (Itron part number CFG-0005-003).



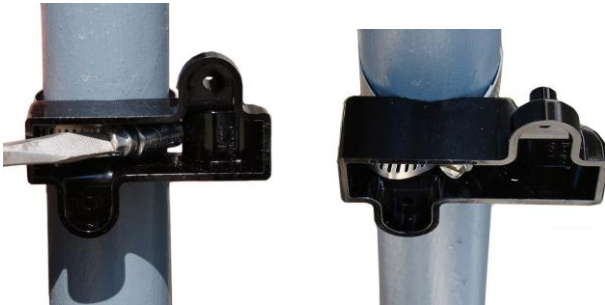
2. Loosen the band clamp screw until the end of the band releases.



3. Push the end of the clamp's band (1) through the holes (2) in the pipe bracket. The pipe bracket must be oriented as shown below.



4. Place the band clamp around the pipe. The band will loosely wrap around the pipe. Push the end of the band through the band clamp screw assembly. Turn the band clamp's screw assembly to fit into the pipe bracket opening. Tighten the clamp screw until the band clamp is secure on the pipe.



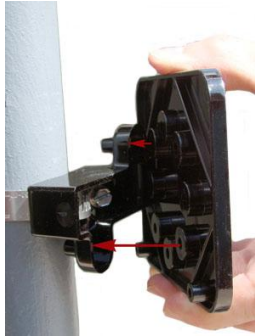
Caution The pipe bracket must fit firmly against the pipe to prevent slippage.

To mount the adapter plate on the pipe bracket

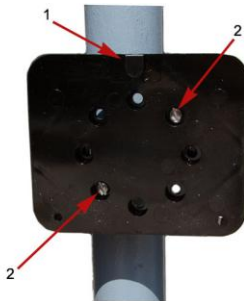


Caution Vertical mounting position is important to maximize RF performance. Mount the 100G Datalogging FN remote ERT module with the module's label arrow pointing up. *The module's arrow must never point to either side or upside down.* The module's tilt tamper functionality is designed to operate with the module installed vertically.

1. Place the adapter plate on the pipe bracket with the mounting lug at the top or bottom. The adapter plate screw bosses fit into the pipe bracket recess.



2. Ensure the adapter plate is positioned as shown below with the mounting lug (1) at the top or bottom. To install the adapter plate on a vertical pipe, use the two shortest (1/2-inch) adapter plate mounting screws from the Remote Mount Installation Kit. Place the mounting screws (2) in the holes shown below.

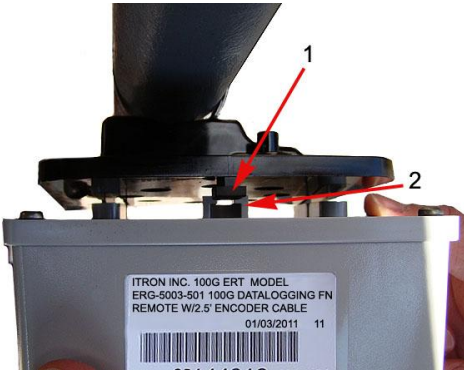


Upright module mounting

3. Tighten both screws securely in an alternating fashion. Itron recommends 9 to 12-inch-pounds torque.

To mount the 100G Datalogging FN remote ERT module on the adapter plate

1. Take the 100G Datalogging FN remote ERT module and the two one-inch mounting screws from the Remote Mount Installation kit. Place the back of the remote endpoint against the face of the adapter plate. The adapter plate mounting lug (1) must be positioned just above the endpoint mounting lug recess (2).



2. Push up on the 100G Datalogging FN remote ERT module until the adapter plate mounting lug (1) is as far as possible inside the module mounting lug recess (2).



3. Install the two one-inch ERT module mounting screws from the installation kit.



4. Tighten the module mounting screws evenly in an alternating fashion. Itron recommends 9 to 12 inch-pounds of pressure.

Adapter Plate Mounting Positions

The following pictures show adapter plates mounted on horizontal or 45-degree angle pipes.



Caution Regardless of the pipe's direction, the adapter plate mounting lug must always be at the top.

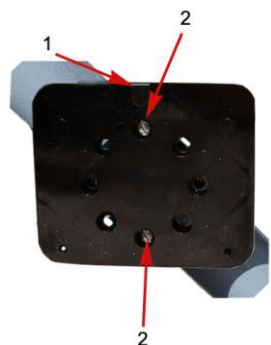
If the pipe is a 45 degree angle up to the right, install the adapter plate as shown below.



Typical module mounting

Mounted adapter plate

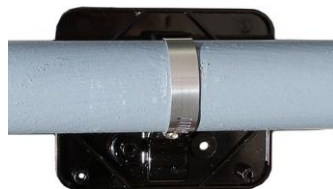
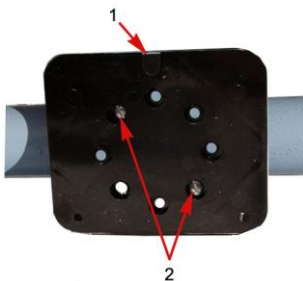
If the pipe is a 45 degree angle up to the left, install the adapter plate as shown below.



Typical module mounting

Mounted adapter plate

If the pipe is horizontal, install the adapter plate as shown below.



Typical module mounting

Mounted adapter plate

To install tamper seals and cable ties

1. Place the new tamper seals from the Remote Mount Installation Kit over the 100G Datalogging FN remote ERT module mounting screws.



2. Firmly push both tamper seals all the way into place with a 1/4-inch nut driver or similar blunt tool.



Note A tamper seal is fully seated when the top of the tamper seal is approximately 1/16 inch below the top of the screw recess.

3. Gather any excess ERT module cable. Loop a cable tie around the pipe and excess module cable.



4. Insert the chiseled end of the cable tie into the locking end and pull the cable tie tight. Cut off and properly dispose the excess cable tie.



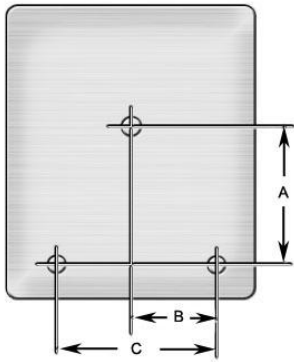
100G Datalogging FN remote ERT module pipe mount installation is complete.

Mounting the ERT Module on a Wall or Other Flat Vertical Surface

To mount the 100G Datalogging FN remote ERT module on a wall or other flat vertical surface

Note For easier installation, you may drill three pilot holes in the mounting surface (use the proper size drill bit to accommodate the module mounting screws, see the Drilling Template below). When drilling pilot holes to mount the 100G Datalogging FN remote ERT module, the holes for the two bottom screws must be on a horizontal line. If you will mount the module on a sheet metal surface, use the mounting screws included with the 100G Datalogging FN remote ERT module mounting kit. Use a comparable wood screw to mount the module on a vertical wood surface.

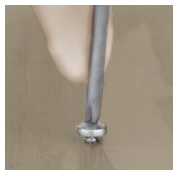
Carefully select a mounting location free from electrical wires. The mounting location must have the proper clearance to accommodate the 1-1/2-inch module mounting screws so nothing is damaged by the drill or mounting screws.



100G Datalogging FN Remote ERT Module drilling template

- A 3 inches
- B 1-11/16 inches
- C 3-3/8 inches

1. Using the three 1-1/2-inch mounting screws from the Remote Mount Installation Kit, turn the mounting screw for the mounting lug (top of module) part way into the mounting surface.



2. Place the 100G Datalogging FN remote ERT module mounting lug recess (on the top of the module's backplate) just under the screw head. Slide the module upward until the screw head fits completely inside the mounting lug recess. Several adjustments may be necessary to properly position the screw for module mounting.



3. Install the bottom two mounting screws. Fasten screws in an alternating fashion until fully tightened to secure the module firmly in position.



To install tamper seals and cable ties

1. Place a new tamper seal (from the Remote Mount Installation Kit) over each endpoint mounting screw.



2. Firmly push both tamper seals into place with a 1/4-inch nut driver or similar blunt tool.

Note A tamper seal is fully seated when the top of the tamper seal is approximately 1/16-inch below the top of the screw recess.

3. To reduce the risk of cable damage, secure the excess module cable with the cable ties from the Remote Mount Installation Kit. Pull the cable tight. Remove and properly dispose the excess cable tie.



100G Datalogging FN remote ERT module installation on a vertical flat surface or wall is complete.

CHAPTER 3

Rotary Meter Installation

This chapter provides the instructions to install the Datalogging FN remote ERT module on rotary gas meters. Reference the Gas Endpoint Meter Compatibility List (see [100G Datalogging FN Remote ERT Module Meter Compatibility List](#) on page 3) for rotary meters compatible with the 100G Datalogging FN remote ERT module .



American rotary meter



Dresser ROOTS® Series LMMA rotary meter



Dresser ROOTS® series B3 meter



Romet Imperial series RM meter



Romet Imperial ECM2 meter

Required Installation Materials Available from Itron

The materials in the following table are required to install a 100G Datalogging FN remote ERT module.

Itron Part Number

ERG-5003-503

Note this remote ERT module comes standard with 12-inch lead wires and may be shipped directly to the meter manufacturer for a factory-installed cable (interface). The interface cable must be purchased directly from the meter manufacturer.



ERG-5002-505

Note this remote ERT module comes standard with 12-inch lead wires and may be shipped directly to the meter manufacturer for a factory-installed cable (interface). The interface cable must be purchased directly from the meter manufacturer.



CFG-0005-003

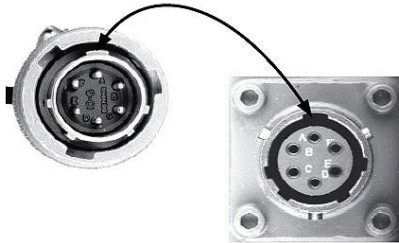
Remote Endpoint Mounting Kit



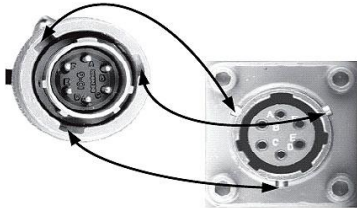
To connect the 100G Datalogging FN remote ERT module cable assembly to the rotary meter

Caution Verify the cable connector mates with the meter connector. Meter manufacturers use different connector styles (types).

1. Align the large lug on the 100G Datalogging FN remote ERT module connector with the large notch on the meter connector.



2. Align the lock ring notches on the module cable connector with the pins on the meter connector.



3. Hold the lock ring on the module connector back and push the plug into the meter connector until it is securely seated.
4. Turn the lock ring clockwise as far as it will go. You will feel it snap into place when it locks.



Warning To remove the module connector plug from the meter connector jack, push in on the lock ring, turn the lock ring counterclockwise as far as possible, and pull out the plug body. Do not pull on the module's connector cable.

5. Install the new Datalogging FN remote ERT module on the wall or a pipe using the Remote Endpoint Mount Kit (Itron part number CFG-0005-003). See [Mounting the 100G Datalogging FN Remote ERT Module](#) on page 6 for mounting instructions.



Programming the Remote ERT Module for Dresser ROOTS® Rotary Meters

To program 100G Datalogging FN remote ERT modules for use with Dresser ROOTS® rotary meters, use the meter drive rates from the drive rate table in this section.

以上内容仅为本文档的试下载部分，为可阅读页数的一半内容。如要下载或阅读全文，请访问：<https://d.book118.com/568101022002006027>