

CHAPTER 6

Elster American and Itron Actaris Commercial Meter Installation

This chapter provides instructions to install the 100G Datalogging Gas Endpoint on Elster American and Itron/Actaris Commercial Meters.



Warning Handle the commercial 100G Datalogging Gas Endpoint carefully so the metal passive radiator antenna is not damaged.



Removing the Index/ Index Assembly from the Meter

Commercial 100G Datalogging Gas Endpoints can be mounted on Elster American Meters in various configurations. These instructions show metal mounting plates without tamper seal cups and plastic mounting plates with tamper seal cups to represent mounting plate options.

Mounting plate with tamper seal cups Mounting plate without tamper seal cups



Indexes may be mounted on the 100G Datalogging Commercial Elster American Gas Endpoint without mounting plates.



Index covers may (or may not) have tamper seal cups (on the back of the cover) for added security. Index removal assumes the installer will remove any tamper seals or wires before continuing with these instructions.

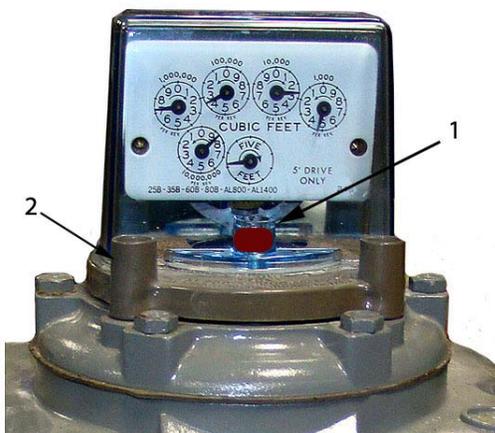


Note It may not be necessary to dismantle your commercial index assembly (index and cover). These instructions do not include index/cover assembly for those applications.

Some diaphragm commercial meters do not require an index assembly mounting plate. Indexes can be mounted directly to the endpoint.

To Remove the Index Assembly

1. Remove any tamper seals (1) (or wire seals) from the index cover and mounting plate screws (2). Set the index/cover assembly aside. You will re-install it later in these instructions.



2. Remove the index cover screws from the meter. Verify screws are 1/2" long and are not corroded. If the screws are the correct length and are not corroded, keep them to re-install the 100G Datalogging Gas Endpoint assembly later in this procedure. If the screws are damaged or not the correct length, discard.



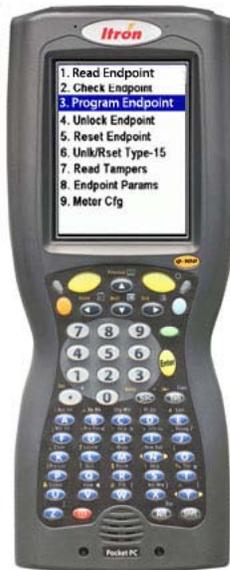
Note Properly dispose all unused screws, old index covers, gaskets, tamper seals, and other leftover materials. Do not leave materials on customer premises.

3. Remove the gasket from the index cover mounting plate (if applicable). Set it aside where it will not be damaged. Remove the tamper seals from the mounting plate. Remove the mounting plate screws and separate the mounting plate from the meter. Place the mounting plate where it will not be damaged. You will use it later in this installation.



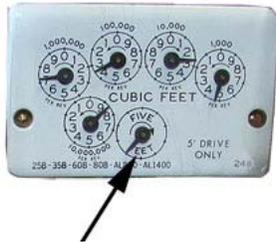
Programming the 100G Datalogging Commercial Gas Endpoint

The 100G Datalogging Gas Endpoint must be programmed with the FC200SR handheld computer loaded with EndPoint-Link® or Point-Link Pro® software version 5.3 or later. See the EndPoint-Link v5.3 (or later) Endpoint Programming Guide (TDC-0744) for more complete programming information.



Caution The 100G Datalogging Commercial Endpoint must be programmed before use. Follow the steps in this section to properly program the endpoint.

Take note of the index drive rate shown on the index. The endpoint is programmed based on the drive rate. Elster American commercial meter index drive rates may be 5-, 10- or 100 cubic feet.



To Program the 100G Datalogging Commercial Gas Endpoint

1. Program the index drive rate into the 100G Datalogging Gas Endpoint using the FC200SR. For all programming and "Check Endpoint" operations, hold the FC200SR as close to vertical as possible. For best success, keep the FC200SR within 6 feet of the target endpoint. Verify you have the correct programming mode (Fixed Network Mode, Mobile/Handheld Mode, or Hard to Read Mobile/Handheld Mode) for your application. Programming parameters are based on the mode defined by your system administrator.
During programming, the 100G Datalogging Gas Endpoint is set to the nearest 100 cubic feet; the last two digits (tens and units) are programmed as zeros (0). After programming is complete, the endpoint assembly will read to the nearest cubic foot.
2. Slowly turn the endpoint's drive wriggler two turns in the direction shown on the index drive rate. This verifies the endpoint is counting properly.



Caution Do not turn the drive wriggler faster than one turn per second.

3. Read the 100G Datalogging Gas Endpoint using the FC200SR.
 - If the read result is higher than the number programmed in Step 1, the 100G Datalogging Gas Endpoint is counting correctly.
 - If the read result is not higher than the number programmed in Step 1, replace the 100G Datalogging Gas Endpoint.

To Attach the 100G Datalogging Commercial Gas Endpoint to the Elster American Commercial Meter



Warning Handle the 100G Datalogging Commercial Gas Endpoint carefully so the metal passive radiator antenna is not damaged.



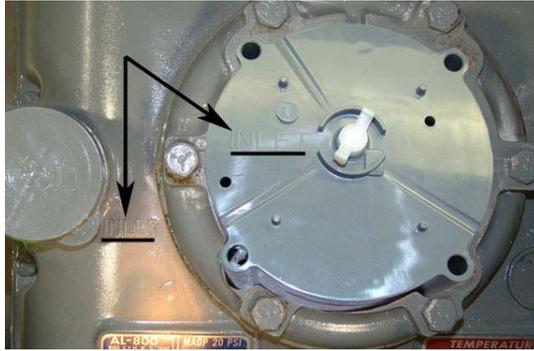
1. Tilt the 100G Datalogging Commercial Gas Endpoint at an angle and turn the wiggler until the drive notches line up with the meter wiggler's drive teeth.



- Align the endpoint so the screw holes line up with the meter's top screw holes. Carefully lower the endpoint on the meter with the wiggler notches lining up with the meter's wiggler teeth.



Warning The INLET label on the 100G Datalogging Commercial Gas Endpoint must line up with the INLET label on the meter case.



- Verify the bottom of the endpoint and the top of the meter meet. The endpoint housing should rest on top of the meter without gaps.



Warning Do not press down on the 100G Datalogging Commercial Gas Endpoint if a gap exists between the endpoint and the meter.



A gap may be caused by misalignment of the endpoint wiggler and meter wiggler's drive teeth. Pushing down on the endpoint could damage the endpoint wiggler or meter drive teeth. To eliminate a gap, slowly turn the endpoint's upper wiggler back and forth until the endpoint aligns with the meter's drive teeth.

- Place the index cover mounting plate on the commercial 100G Datalogging Gas Endpoint so the printing "FLOW FRONT AL800 AL1000 AL1400 AL2300 AL5000 TURBINE ROTARY" stamped on the plate is toward the front of the meter. (A gap between the mounting plate and meter at the screw locations is normal.)



- Install four mounting screws (SCR-0062-001 - see [Installation Prerequisites](#) on page 8 for screw information) and tighten them in an alternating diagonal sequence. For metal mounting plates with a flat screw surface, use endpoint mounting screws with internal tooth washers. For plastic mounting plates with tamper screw cups, use endpoint mounting screws (AS-568A-011, 5/16" ID x 7/16" OD o-rings may be used for a maximum moisture seal). Turn each screw 1/4 to 1/2 turn after it contacts the mounting plate. If you have access to a torque driver, tighten mounting screws to 72 inch-pounds.



- Place new tamper seals over screws (if mounting plate has tamper seal cups) and press into place with an 11/32" nut driver or similar blunt tool.

To Attach the Index/Cover Assembly on the Elster American Commercial Meter

1. Place the mounting plate gasket (previously removed) on the index cover mounting plate. Align the gasket and index cover mounting plate screw holes.
2. Place the index/cover assembly on the index mounting plate. (The index must face the direction it faced before removal.) Attach the index/cover assembly on the mounting plate using original index screws. Insert one screw and tighten two turns to hold it in place on the mounting plate. Insert the second mounting screw and tighten until secure. Completely tighten the first mounting screw. Each index cover mounting screw must be tightened evenly.
3. Turn the commercial 100G Datalogging Gas Endpoint wriggler so it intersects with the index wriggler. Carefully lower the index-cover mounting plate assembly onto the 100G Datalogging Gas Endpoint.



4. Install four endpoint mounting screws (SCR-0062-001, see [Installation Prerequisites](#) on page 8). Tighten screws in an alternating diagonal pattern.
 - Insert the first screw and tighten enough to hold index assembly in place.
 - Insert the second screw diagonal to first screw and tighten two to three turns.
 - Insert the third screw, tightening two or three turns.
 - Insert the fourth screw and tighten until secure.
 - Tighten the first, 2nd, and third screw until secure. Turn each screw 1/4 to 1/2 turn after it contacts the cover.

Each endpoint mounting screw must be tightened evenly. If you have access to a torque-driver, tighten mounting screws to 72-inch pounds.

5. Install new tamper or wire seals. If tamper seals are installed, press into place with an 1 1/32 nut driver or similar blunt tool. Crimp the seal if utility-approved wire seals are installed.

This completes installation of the 100G Datalogging Commercial Gas Endpoint on an Elster American Commercial meter.



Installing the 100G Datalogging Commercial Gas Endpoint on an Itron/Actaris Commercial Meter

This section provides instructions for installing the 100G Datalogging Commercial Gas Endpoint on Itron/Actaris 675A, 800A, and 1000A commercial meters. Installation requires an Itron/Actaris adapter kit from Itron/Actaris.

Itron/Actaris Adapter Kit (Part Number 80005901-01)

Adapter plate



Endpoint mounting screws (4)



Screw bushings (4)



Tamper seals



Extension driver



Before You Begin

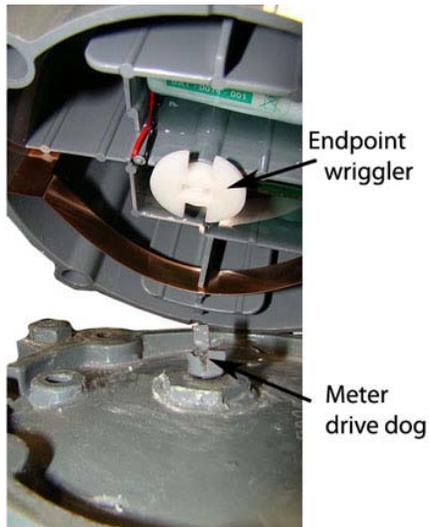
Follow [To Remove the Index/Index Assembly from the Meter](#) on page 57 to prepare the Itron-Actaris meter for installation. Program the Commercial 100G Datalogging Gas Endpoint (see [Programming the 100G Datalogging Gas Endpoint Assembly](#) on page 60) prior to installation.

To Attach the 100G Datalogging Commercial Gas Endpoint to the Meter

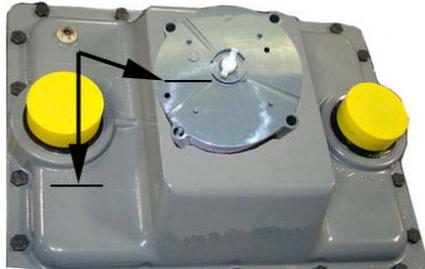
1. Turn the 100G Datalogging Commercial Gas Endpoint over and place the four mounting screw bushings into the screw holes on the endpoint.



2. Turn the 100G Datalogging Commercial Gas Endpoint on its side and align the wiggler with the Itron-Actaris Commercial meter's drive dog.



3. Inlet lettering on the 100G Datalogging Commercial Gas Endpoint must line up with Inlet lettering on the meter. Slowly lower the endpoint on the Itron-Actaris Commercial meter aligning the drive dog and wiggler. The endpoint housing should rest on the top of the meter without gaps.



Warning Do not press down on the 100G Datalogging Gas Endpoint if a gap exists between the endpoint and the meter.



A gap may be caused by misalignment of the endpoint wiggler and meter wiggler's drive teeth. Pushing down on the endpoint could damage the endpoint wiggler or meter drive teeth. To eliminate a gap, remove the 100G Datalogging Gas Endpoint and repeat steps 2 and 3.

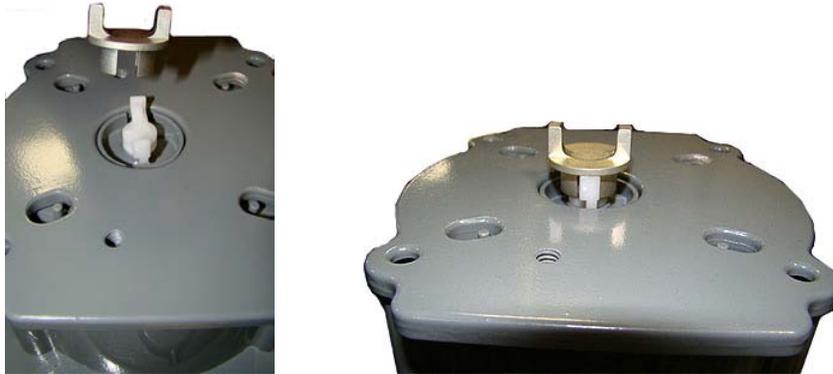
To Attach the Index on the Itron-Actaris Commercial Meter

1. Place the Itron-Actaris adapter plate on the 100G Datalogging Commercial Gas Endpoint with the two small screw holes in the adapter plate to the back of the meter.

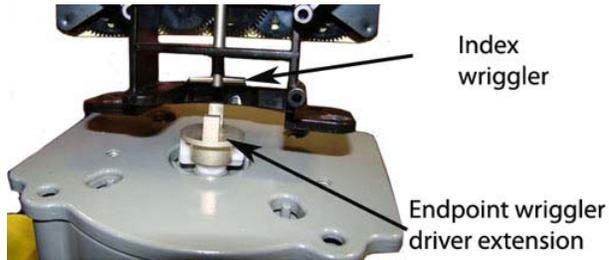


Meter Front

2. Place the extension driver on the 100G Datalogging Commercial Gas Endpoint wiggler.



3. Align the index wiggler with the commercial 100G Datalogging Commercial Gas Endpoint wiggler driver extension.



4. Install the two index mounting screws. Tighten the first screw two or three turns. Install second screw and tighten to secure. Tighten the first screw to a snug fit. Each index mounting screw must be tightened evenly.



5. Place the index cover over the index with the clear side covering the index dials for easy reading. Align the holes in the index cover with the endpoint adapter plate mounting holes. Secure with the four mounting screws from the adapter kit. Tighten the mounting screws in a diagonal alternating pattern.
 - Insert the first screw and tighten enough to hold the index in place.
 - Insert the second screw and tighten two to three turns.
 - Insert the third mounting screw and tighten two to three turns.
 - Insert the fourth mounting screw and tighten.

Tighten the first, third and second screw. Turn each screw 1/4 to 1/2 turn after the screw contacts the index cover. Each index mounting screw must be tightened evenly. If you have access to a torque-driver, tighten mounting screws to 72-inch pounds.



6. Insert tamper seals in the tamper seal cups on the index cover and press into place with an 11/32 nut driver or similar blunt tool.



This completes installation of the commercial 100G Datalogging Gas Endpoint on the Itron-Actaris Commercial meter.



Sensus/Rockwell Commercial Meter Installation

This chapter provides instructions to install the 100G Datalogging Commercial Gas Endpoint on a Commercial Sensus/Rockwell diaphragm meter.



Removing the Index/ Index Assembly from the Meter

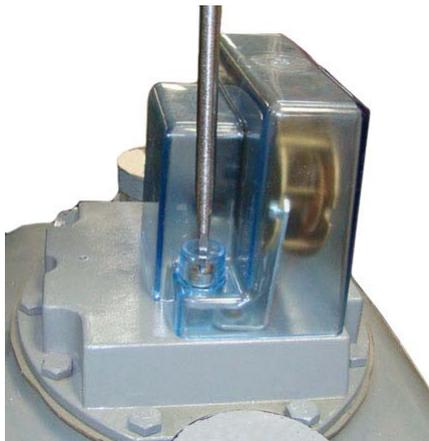
100G Datalogging Commercial Gas Endpoints can be mounted on Sensus/Rockwell Commercial Meters in various configurations. These instructions show the index assembly mounted without a mounting plate.



Note Sensus/Rockwell diaphragm commercial meters do not require an index assembly mounting plate. Indexes can be mounted directly to the endpoint.

To Remove the Index/Index Assembly from the Meter

1. Remove any tamper seals (or wire seals) from the index cover and remove the index cover mounting screws. You will re-install it later in these instructions.



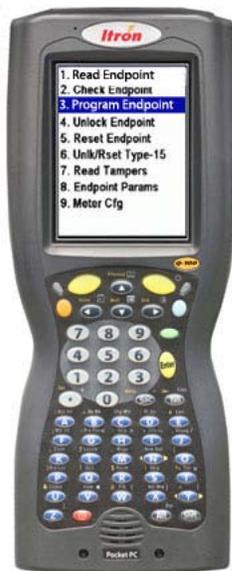
2. Remove the index screws from the meter. Set the index cover aside where it will not be damaged or fill with dirt, rain or snow. You will re-install the index later in this procedure.



Note Properly dispose all unused screws, old index covers, gaskets, tamper seals, and other leftover materials. Do not leave materials on customer premises.

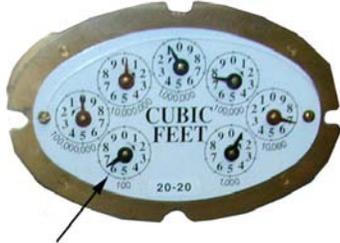
Programming the 100G Datalogging Gas Endpoint

The 100G Datalogging Commercial Endpoint must be programmed with the FC200SR handheld computer loaded with EndPoint-Link® or Point-Link Pro® software version 5.3 or later. See the EndPoint-Link v5.3 (or later) Endpoint Programming Guide (TDC-0744) for more complete programming information.



Caution The 100G Datalogging Commercial Sensus/Rockwell Endpoint must be programmed before use. Follow the steps in this section to properly program the endpoint.

Take note of the index drive rate shown on the index. The endpoint is programmed based on the drive rate. Sensus/Rockwell commercial meter index drive rates may be 5-, 10- or 100-cubic feet. The seven-dial index shown is a 100-cubic feet drive rate.



To Program the 100G Datalogging Commercial Gas Endpoint

1. Program the index drive rate into the commercial endpoint using the FC200SR. For all programming and "Check Endpoint" operations, hold the FC200SR as close to vertical as possible. For best success, keep the FC200SR within 6 feet of the target endpoint. Verify you have the correct programming mode (Fixed Network Mode, Mobile/Handheld Mode, or Hard to Read Mobile/Handheld Mode) for your application. Programming parameters are based on the mode defined by your system administrator.
During programming, the 100G Datalogging Gas Endpoint is set to the nearest 100 cubic feet; the last two digits (tens and units) are programmed as zeros (0). After programming is complete, the endpoint assembly will read to the nearest cubic foot.
2. Slowly turn the endpoint's drive wiggler two turns in the direction shown on the index drive rate. This verifies the endpoint is counting properly.



Caution Do not turn the drive wiggler faster than one turn per second.

3. Read the 100G Datalogging Gas Endpoint using the FC200SR.
 - If the read result is higher than the number programmed in Step 1, the 100G Datalogging Gas Endpoint is counting correctly.
 - If the read result is not higher than the number programmed in Step 1, replace the 100G Datalogging Gas Endpoint.

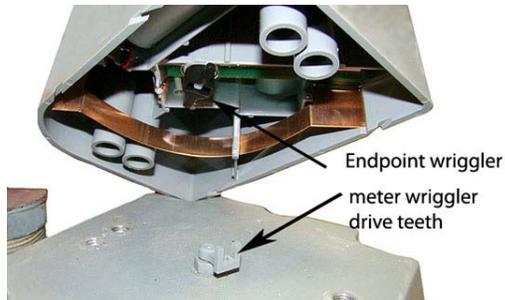
Attaching the 100G Datalogging Commercial Endpoint to a Sensus/Rockwell Commercial Diaphragm Meter

Warning Handle the 100G Datalogging Commercial Gas Endpoint carefully so the metal passive radiator antenna is not damaged.



To Attach the 100G Datalogging Commercial Endpoint

1. Tilt the 100G Datalogging Commercial Gas Endpoint at an angle and turn the wiggler until the drive notches line up with the meter wiggler's drive teeth.



2. Align the 100G Datalogging Commercial Gas Endpoint so the screw holes line up with the meter's top screw holes. Carefully lower the endpoint on the meter so the wiggler's bars line up with the meter drive dog. Itron recommends installation with one bar inserted into the meter drive dog's u-shaped gear.



Warning The INLET label on the 100G Datalogging Commercial Gas Endpoint must line up with the INLET label on the Sensus/Rockwell meter case.



3. Verify the bottom of the 100G Datalogging Commercial Gas Endpoint and the top of the meter meet. The endpoint housing should rest on top of the meter without gaps.

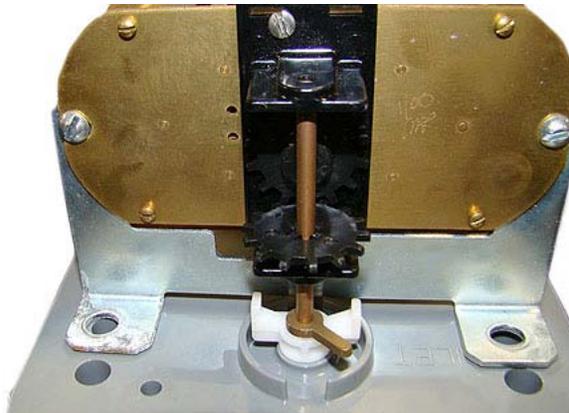


Warning Do not press down on the 100G Datalogging Commercial Gas Endpoint if a gap exists between the endpoint and the meter.

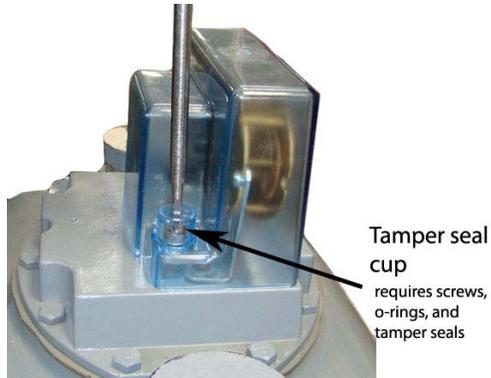


A gap may be caused by misalignment of the endpoint wiggler and meter wiggler's drive teeth. Pushing down on the endpoint could damage the endpoint wiggler or meter drive teeth. To eliminate a gap, slowly turn the 100G Datalogging Commercial Gas Endpoint's upper wiggler back and forth until the endpoint aligns with the meter's drive teeth.

4. Align the 100G Datalogging Commercial Gas Endpoint with the index mounting holes. Verify the index drive dog intersects with the endpoint's wiggler. Install the endpoint mounting screws (SCR-0062-003 see [Installation Prerequisites](#) on page 8 for screw information). Turn each screw 1/4 to 1/2 turn after it contacts the index/endpoint assembly.



5. Install the index cover. For index covers with flat-surface screw holes, use screws (SCR-0062-002), flat washers (WSH-0020-005), and cork washers (WSH-0032-001). For index covers with tamper seal cups, use screws, (AS-568A-011, 5/16" ID x 7/16 OD) o-rings, and tamper seals.



6. Place new tamper seals over screws (if mounting plate has tamper seal cups) and press into place with an 11/32" nut driver or similar blunt tool. If your mounting assembly requires a utility-approved wire seal, pass wires through holes in the screw heads and crimp the approved wire seal.



This completes installation of the 100G Datalogging Gas Endpoint on the Sensus/Rockwell Commercial Diaphragm meter.



Dresser ROOTS Commercial Rotary Meter Installation

This chapter provides the instructions to mount 100G Datalogging Gas Endpoints (residential and commercial) on Dresser ROOTS Commercial Rotary Meters.

Some commercial AMR applications require a Dresser ROOTS Rotary Meter with a residential 100G Datalogging Gas Endpoint. Only Elster American version residential 100G Datalogging Gas Endpoints are compatible with Dresser ROOTS series rotary gas meters. This chapter provides the instructions to mount an Elster American residential 100G Datalogging Gas Endpoint on Dresser ROOTS AMR-ready Rotary Commercial Meters. Installation requires an AMR adapter kit supplied by Dresser. Refer to the [Meter Compatibility List](#) on page 2 for Dresser AMR adapter kit part numbers.

Installation Prerequisites

Materials Supplied By Itron

- 100G Datalogging Gas Endpoint
- New tamper seals - if applicable

Materials Supplied by You

- AMR-ready Dresser ROOTS Rotary Meter
- Adapter Kit from Dresser



Note Follow the Dresser Field Installation Instructions to modify the AMR-ready Dresser ROOTS Meter for 100G Datalogging Gas Endpoint installation. Contact Dresser distributor or Dresser representative for installation instructions specific to the required AMR adapter kit.

Installation Examples

The following pictures show typical installations.



Dresser B3 CTR/TC



Dresser LMMA CTR



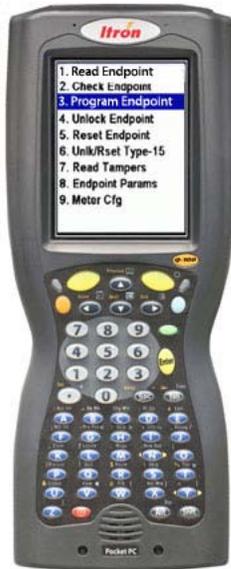
Dresser LMMA TC



Dresser 8C15

Programming the 100G Datalogging Gas Endpoint Assembly

The 100G Datalogging Gas Endpoint must be programmed with the FC200SR handheld computer loaded with EndPoint-Link® or Point-Link Pro® software version 5.3 or later. See the Endpoint-Link v5.3 (or later) Endpoint Programming Guide (TDC-0744) for more complete programming information.



Caution The 100G Datalogging Gas Endpoint must be programmed before use. Follow the steps in this section to properly program the endpoint.

The endpoint is programmed based on the meter's drive rate. See [B3](#), [LMMA](#), and [S3A CTR/TC Dresser ROOTS Series Register Settings and Direct Drive Programming Information](#) on page 85.

To Program the 100G Datalogging Gas Endpoint

1. Program the meter drive rate into the 100G Datalogging Gas Endpoint using the FC200SR. For all programming and "Check Endpoint" operations, hold the FC200SR as close to vertical as possible. For best success, keep the FC200SR within 6 feet of the target endpoint. Verify you have the correct programming mode (Fixed Network Mode, Mobile/Handheld Mode, or Hard to Read Mobile/Handheld Mode) for your application. Programming parameters are based on the mode defined by your system administrator.

During programming, the 100G Datalogging Gas Endpoint is set to the nearest 100 cubic feet; the last two digits (tens and units) are programmed as zeros (0). After programming is complete, the endpoint assembly will read to the nearest cubic foot.

2. Slowly turn the endpoint's drive wiggler two turns in the direction shown on the index drive rate. This verifies the endpoint is counting properly after assembly.



Caution Do not turn the drive wiggler faster than one turn per second.

3. Read the 100G Datalogging Gas Endpoint using the FC200SR.
 - If the read result is higher than the number programmed in Step 1, the 100G Datalogging Gas Endpoint is counting correctly.
 - If the read result is not higher than the number programmed in Step 1, replace the 100G Datalogging Gas Endpoint.

B3, LMMA, and S3A CTR/TC Dresser ROOTS Series Register Settings and Direct Drive Programming Information

Use the information in the following tables to program Dresser Roots Series B3, LMMA, and S3A Non-compensated Counter (CTR) and Temperature Compensated Counter (TC) registers. Reference the [Meter Compatibility List](#) on page 2 to confirm compatibility.

Settings for Series B3 Registers

Model	Meter size	Settings
CTR	8C-15C and 2M-11M	Number of dials: 5 Drive rate: 10 PCOMP factor: NONE
	16M-56M	Number of dials: 6 Drive rate: 100 PCOMP factor: NONE
TC	8C-15C and 2M-11M	Number of dials: 5 Drive rate: 100 PCOMP factor: NONE
	16M	Number of dials: 6 Drive rate: 1000 PCOMP factor: NONE

Settings for LMMA Registers

Model	Meter size	Settings
CTR	1.5M-11M	Number of dials: 5 Drive rate: 10 PCOMP factor: NONE
	16M	Number of dials: 6 Drive rate: 100 PCOMP factor: NONE
TC	1.5M-11M	Number of dials: 5 Drive rate: 50 PCOMP factor: NONE
	16M	Number of dials: 6 Drive rate: 500 PCOMP factor: NONE

Settings for Series S3A Registers

Model	Meter Size	Settings
CTR	1.5M - 11M	Number of dials: 5 Drive rate: 10 PCOMP factor: NONE
	16M	Number of dials: 6 Drive rate: 100 PCOMP factor: NONE
TC	1.5M - 11M	Number of dials: 5 Drive rate: 100 PCOMP factor: NONE
	16M	Number of dials: 6 Drive rate: 1000 PCOMP factor: NONE

**B3, LMMA and S3A CTR/TC Meter Drive Rates:
Residential Direct Drive Programming***

B3 CTR Meter Size	B3 CTR Meter Drive Rate
8C	10
11C	10
15C	10
2M	10
3M	10
5M	10
7M	10
11M	10
16M	100
23M	100
38M	100
56M	100

Drive rates in this table are for direct-mount residential style endpoints only (NOT commercial or remote endpoints).

B3 TC Meter Size	B3 TC Meter Drive Rate
8C	100
11C	100
15C	100
2M	100
3M	100
5M	100
7M	100
11M	100
16M	1000
LMMA CTR Meter Size	LMMA CTR Meter Drive Rate
1.5M	10
3M	10
5M	10
7M	10
11M	10
16M	100

LMMA TC Meter Size	LMMA TC Meter Drive Rate
1.5M	50
3M	50
5M	50
7M	50
11M	50
16M	500
S3A CTR Meter Size	S3A CTR Meter Drive Rate
1.5M	10
3M	10
5M	10
7M	10
11M	10
16M	100
S3A TC Meter Size	S3A TC Meter Drive Rate
1.5M	100
3M	100
5M	100
7M	100
11M	100
16M	1000



Note S3A rotary meters are LMMA meters retrofitted with Series 3 End Bell Adapter.

Installing the Residential 100G Datalogging Gas Endpoint Assembly to the Dresser ROOTS Rotary Meter

After 100G Datalogging Gas Endpoint programming is complete, attach the 100G Datalogging residential endpoint assembly to the Dresser ROOTS Rotary Meter. This mounting procedure applies to B3 CTR/TC, LMMA CTR/TC, and 8C15 series Dresser ROOTS Meters.

To Attach the 100G Datalogging Gas Endpoint

1. The 100G Datalogging Gas Endpoint must be mounted on the adapter plate in an upright position. Align the 100G Datalogging Gas Endpoint wiggler with the opening between the tabs of the adapter's drive dog. Insert one endpoint mounting screw and tighten enough to hold the endpoint. Do not completely tighten. Insert the second mounting screw and tighten two turns. Insert the third mounting screw and tighten two turns. Insert the last mounting screw and tighten until snug. Tighten the remaining mounting screws in an alternating, diagonal pattern until snug. All mounting screws must be tightened evenly.



Warning A gap may be caused by misalignment of the endpoint wiggler and meter wiggler's drive teeth. Pushing down on the endpoint could damage the endpoint wiggler or meter drive teeth. To eliminate a gap, remove the endpoint assembly and re-align the endpoint wiggler with the meter drive dog.

2. Complete necessary paperwork and verify all excess materials are removed from the customer's premises.

100G Datalogging Residential Gas Endpoint installation on the Dresser ROOTS Rotary Meter is complete.

Installing the 100G Datalogging Commercial Gas Endpoint on a Dresser ROOTS Rotary Meter

The information in this section guides you through the installation of the 100G Datalogging Commercial Gas Endpoint on Dresser ROOTS rotary meters.



Note A Dresser ROOTS rotary gas meter with an instrument drive is required for this installation procedure. These instructions show an Elster American 100G Datalogging Commercial Gas Endpoint. The installation procedure is the same for the Sensus/Rockwell 100G Datalogging Commercial Gas Endpoint.

100G Datalogging Elster American Commercial Gas Endpoint



100G Datalogging Sensus/Rockwell Commercial Gas Endpoint



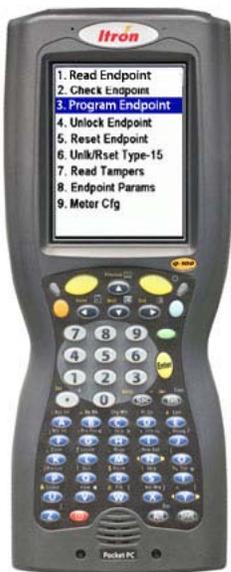
Installation Requisites

Installation requires the following items:

- Drive cover kit
- 100G Datalogging Commercial Gas Endpoint
- A flat, slot-drive screwdriver

Programming the 100G Datalogging Commercial Gas Endpoint Assembly

The 100G Datalogging Commercial Gas Endpoint must be programmed with the FC200SR handheld computer loaded with EndPoint-Link® or Point-Link Pro® software version 5.3 or later. See the EndPoint-Link v5.3 (or later) Endpoint Programming Guide (TDC-0744) for more complete programming information.



Caution The 100G Datalogging Commercial Gas Endpoint must be programmed before use. Follow the steps in this section to properly program the endpoint.

The endpoint is programmed based on the meter's drive rate. See [B3](#), [LMMA](#), and [S3A CTR/TC Dresser ROOTS Series Register Settings and Direct Drive Programming Information](#) on page 93.

To Program the 100G Datalogging Commercial Gas Endpoint

1. Program the meter drive rate into the 100G Datalogging Commercial Gas Endpoint using the FC200SR. For all programming and "Check Endpoint" operations, hold the FC200SR as close to vertical as possible. For best success, keep the FC200SR within 6 feet of the target endpoint. Verify you have the correct programming mode (Fixed Network Mode, Mobile/Handheld Mode, or Hard to Read Mobile/Handheld Mode) for your application. Programming parameters are based on the mode defined by your system administrator.
During programming, the 100G Datalogging Commercial Gas Endpoint is set to the nearest 100 cubic feet; the last two digits (tens and units) are programmed as zeros (0). After programming is complete, the endpoint assembly will read to the nearest cubic foot.

2. Slowly turn the endpoint's drive wiggler two turns in the direction shown on the index drive rate. This verifies the endpoint is counting properly after assembly.



Caution Do not turn the drive wiggler faster than one turn per second.

3. Read the 100G Datalogging Commercial Gas Endpoint using the FC200SR.
 - If the read result is higher than the number programmed in Step 1, the 100G Datalogging Commercial Gas Endpoint is counting correctly.
 - If the read result is not higher than the number programmed in Step 1, replace the 100G Datalogging Commercial Gas Endpoint.

B3, LMMA, and S3A CD/TD Dresser ROOTS Series Meter Drive Rates

Use the information in the following tables to program 100G Datalogging Commercial Endpoints installed on Dresser Roots Series B3, LMMA, and S3A Non-compensated Counter with Instrument Drive (CD) and Temperature Compensated Counter with Instrument Drive (TD) registers. Reference the [Meter Compatibility List](#) on page 2 to confirm compatibility.



Warning Drive rates listed in the following tables are for commercial endpoint programming. Do not use these settings to program residential or remote endpoints.

B3 CD Meter Size	B3 CD Meter Drive Rates
8C	10
11C	10
15C	10
2M	10
3M	10
5M	10
7M	10
11M	10
16M	100
23M	100
38M	100
56M	100
B3 TD Meter Size	B3 TD Meter Drive Rate
8C	100
11C	100
15C	100
2M	100
3M	100
5M	100
7M	100
11M	100
16M	1000

LMMA CD Meter Size	LMMA CD Meter Drive Rate
1.5M	10
3M	10
5M	10
7M	10
11M	10
16M	100
LMMA TD Meter Size	LMMA TD Meter Drive Rate
1.5M	100
3M	100
5M	100
7M	100
11M	100
16M	1000
S3A CD Meter Size	S3A CD Meter Drive Rate
1.5M	100
3M	100
5M	100
7M	1000
11M	100
16M	1000
S3A TD Meter Size	S3A TD Meter Drive Rate
1.5M	100
3M	100
5M	100
7M	100
11M	100
16M	1000



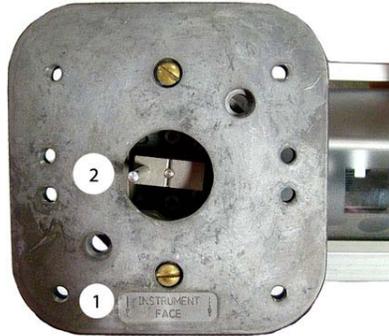
Note S3A rotary meters are LMMA meters retrofitted with Series 3 End Bell Adapter.

To Attach the 100G Datalogging Commercial Gas Endpoint to the Meter



Note A cover is installed on the 100G Datalogging Commercial Gas Endpoint mounted to a Dresser ROOTS Meter with S3A LMMA Accessory Units (or other Dresser ROOTs adapters with odometer gauges).

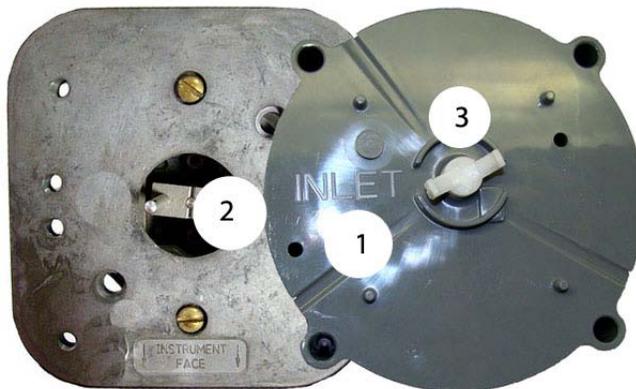
1. Locate the INSTRUMENT FACE stamp (2) and position the meter with the drive dog (1) aligned (as shown).



Warning Handle the commercial 100G Datalogging Commercial Gas Endpoint carefully so the metal passive radiator antenna is not damaged.



2. Locate the INLET (1) stamp on the endpoint and position the endpoint as shown. Verify the 100G Datalogging Commercial Gas Endpoint wiggler (3) and drive dog shaft (2) are aligned.



3. Verify the endpoint wiggler and drive dog shaft are engaged by turning the commercial endpoint wiggler. When properly engaged, you will feel resistance.
4. Place the index mounting plate on the endpoint and install the four mounting screws. Do not disturb the shaft alignment.



5. Install the four 100G Datalogging Commercial Gas Endpoint mounting screws (supplied with the commercial endpoint). Tighten mounting screws in an alternating, diagonal sequence.
 - Turn each screw 1/4 to 1/2 turn after it contacts the cover.
 - If you can utilize a torque wrench, tighten to 72 inch-pounds.Each endpoint mounting screw must be tightened evenly.
6. Insert new utility-approved wire seals and crimp (if required).



Note To mount an index and index cover on a rotary meter without an accessory odometer unit, remove the domed cover and reference [To Attach the Index on the Itron-Actaris Commercial Meter](#) on page 69.

Completed Installation Examples

100G Datalogging Elster American Commercial Gas Endpoint mounted on a Dresser ROOTS Meter



100G Datalogging Sensus/Rockwell Commercial Gas Endpoint mounted on a Dresser ROOTS Meter

