

Intelis™ Gas Meter Tips and Guidance

For builders and HVACs (TSSA certificate holders)
Applicable to new construction and retrofits

This document provides HVAC contractors and builders with important information on the Itron Intelis 250 and 425 ultrasonic gas meters being deployed by Enbridge Gas. It highlights what's new, what hasn't changed, and what contractors or builders should know to avoid service interruptions.

Intelis meter overview:

An Intelis meter or a standard diaphragm meter may be installed for residential or light commercial applications. Enbridge Gas has been installing Intelis meters since 2023 to support meter availability and to modernize metering capabilities.



Image 1: Standard diaphragm meter (back) and Intelis meter (front)

Key points:

- Newer technology with a more compact design.
- Built-in safety and diagnostic features.
- Accurate meter reading using a digital display.
- Remote reading capability.
- Contractors cannot request a specific meter model through GetConnected.
- Enbridge Gas has sole discretion over the equipment it installs at a particular location.

Design, clearances and meter sets:

The use of Intelis meters does not impact site design. No changes are required to:

- Meter alcove designs
- Clearance requirements
- End meter or banked meter manifolds
 - Intelis meters can be mixed with standard diaphragm meters on the same manifold

Meter capacity and construction heat:

It is imperative to provide accurate load information when submitting GetConnected applications to ensure that the meter is sized appropriately. Exceeding meter capacity can trigger:

- Meter damage
- High flow alarms
- Automatic shutoff
- Service interruption

Note: Intelis 250 and Intelis 425 meters, just like standard 200 and 400 series diaphragm meters, have safe operational thresholds of 300,000 BTU/h and 600,000 BTU/h respectively. These thresholds are applicable for both construction heat and regular appliance use.

Safety shutoff valve—what contractors need to know!

The Intelis meter contains an internal safety shutoff valve so the meter will shut off gas within seconds and automatically trigger a visual indicator alarm if:

- High flow is detected
 - Intelis 250 = Loads at or above 500,000 BTU/h
 - Intelis 425 = Loads at or above 850,000 BTU/h
- High temperature is detected (Above 80 C)

Note: It is important to introduce gas SLOWLY when energizing the system. Failing to do so can permanently lock out the meter. If gas is introduced too quickly at the riser, the internal safety valve can close. The meter will then have to be removed and replaced because the valve cannot be reset in the field. Meter replacements can delay the project.

LCD display and meter reading steps:

The digital display is normally blank to conserve the battery. A blank screen does not mean the meter is broken. Advise homeowners or tenants of this condition.

1. You can press the button in the top right corner on the front side of the meter to activate the screen.
 - a. The opening screen (menu 1) will show the consumption index, battery life, and safety valve status. It will then rotate through the various menus for roughly 1 minute and turn off.
 - b. Pressing the button again also allows you to cycle through the menus, but the screen will shut off after a short period of time to conserve battery.
 - c. The values left of the decimal are the correct way to read the consumption index which is displayed as 00000.000 m³ (CCF on older meters).
 - d. In the middle of the LCD display, there's a safety valve icon indicated by the yellow box in image 2. If this safety valve icon has an "X" overlapping it, the safety valve has been triggered to close and the meter needs to be replaced. (Image 2)
2. Technicians or site staff can access and lock onto menu 6 to view flow rate and high-resolution test volume data for appliance clocking, flow verification, leak testing, and troubleshooting. To lock onto menu 6, place and hold a magnet directly above the round port beside the button.
 - a. Place your magnet on top of the meter where the small QR code is (above round port).
 - b. Flat magnets sit well on top, but tape can also be used to secure the magnet in position.
 - c. When the screen is blank and the magnet is positioned correctly, a red light will flash once in the round port and the display will lock onto menu 6. (Image 3)
 - d. In menu 6, the flow rate is displayed along with a test volume reading shown as 00000.0000 m³ (CCF on older meters). For measurement and appliance setup purposes, use the digits to the left of the decimal as the primary reading. The four digits to the right of the decimal provide higher resolution, allowing technicians to observe small changes in gas consumption.
 - e. Ensure the magnet is removed once your work is complete.



Image 2: Intelis meter showing safety valve indicator open and closed

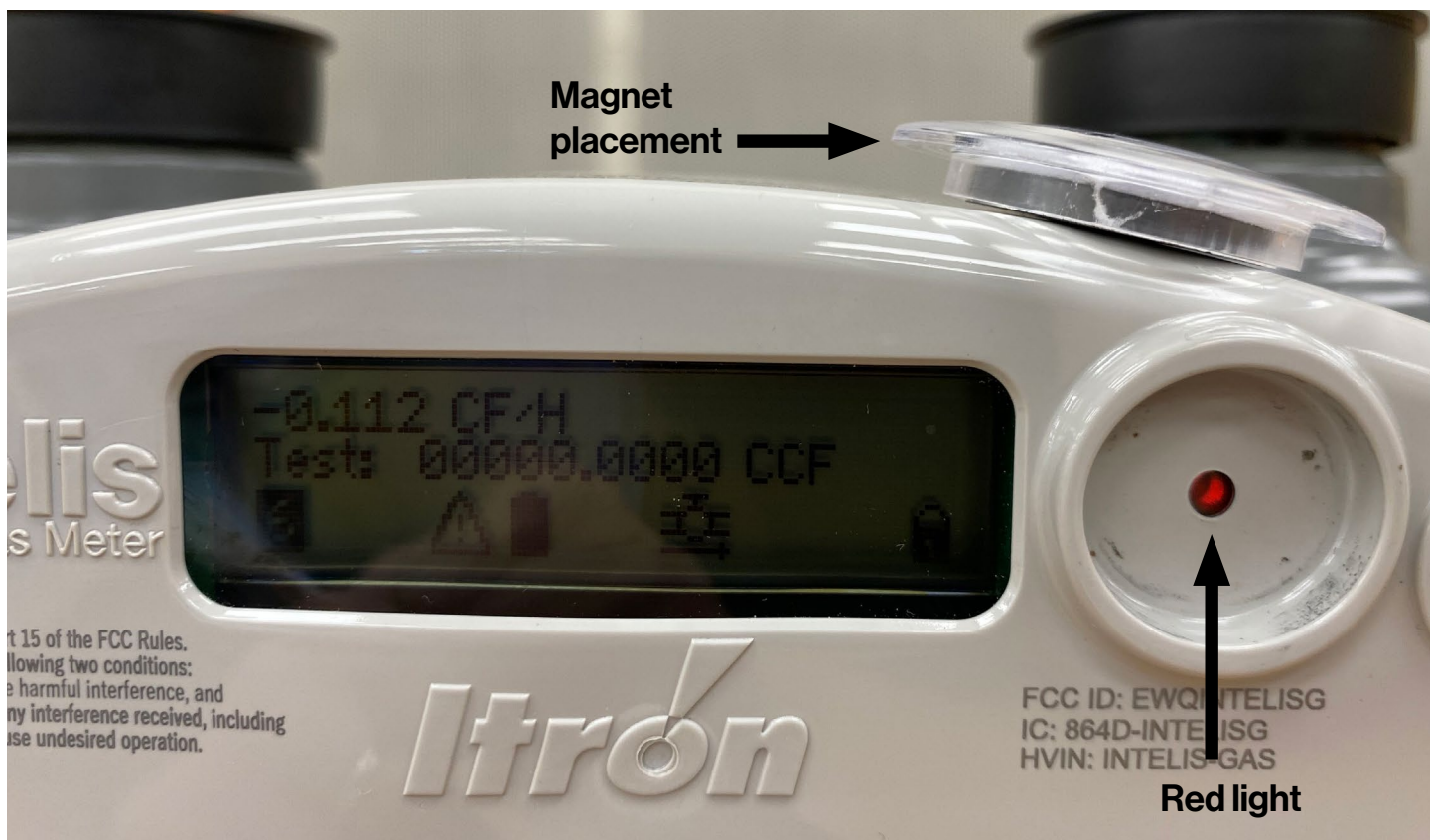


Image 3: Showing magnet placement and red light indicator to lock on menu 6

3. Alternatively, the manufacturer (Itron) has a special magnet that fits into the round port beside the button that will also lock menu 6 for convenience. Contact Itron directly for sales-related support.

Note: Please be aware that in very cold weather conditions, below -15 C, the LCD display may appear faint or may not display clearly due to how the meter's electronics function in cold temperatures. This does not mean the battery is dead or that the meter is broken.

Contact info for questions or support:

Enbridge Gas Ontario

Email: CustomerConnectionsContactCentre@enbridge.com

Phone (Builder and HVAC gas application support):

1-866-772-1045

Phone (All other inquiries): 1-877-362-7434

Itron (manufacturer)

Email: support@itron.com

Customer Support Centre: 1-509-632-2029

Key takeaways:

- Introduce gas slowly to avoid triggering the safety valve—this is the most common issue encountered. Be sure to purge the system first following TSSA procedures.
- Respect meter capacity limits, especially for construction heat.
- For convenience, consider using a magnet to lock menu 6 for improved meter reading during appliance setup and troubleshooting.
- Treat Intelis meters the same as standard diaphragm meters, while being mindful of the safety valve.
- Advise homeowners that a blank digital display does not mean the meter is broken.
- When in doubt, contact Enbridge Gas before proceeding.