





Residential and Light Commercial Gas Diaphragm Meter

Growing demand for natural gas necessitates a renewed focus on precision in measuring consumption. The Itron I-250 gas diaphragm meter offers exceptional accuracy and reliability for enhanced revenue assurance. Improving on a long-trusted design, the I-250 is a positive displacement measurement device with proven performance. A classic returns.

# Accurate. Reliable.

To effectively protect utility revenues, metering data must reflect actual consumption. The I-250 meter measurement performance stems from its accuracy over a wide range of flow rates and in a variety of harsh weather conditions, the result of a simple threechamber design with comparably few moving parts. Fewer wear points also result in simplified maintenance and longer meter life for greater dependability.

## Proven. Trusted.

The new I-250 meter design leverages decades of field-proven use and improvements and is now built with innovative production methods, incorporating the best of today's robust materials, making it one of the premium residential and light commercial meters available today. A longstanding reputation for performance and quality affords the new I-250 meter a well-deserved level of credibility.

### **Benefits**

- » Accuracy over wide range of gas flow rates
- » Ease of maintenance
- » Interchangeable parts
- » Ease of installation

## **KEY FEATURES**

Each of these features contributes to increased accuracy and longer life with less maintenance.

- » Design simplicity
- » Wearless orbital valve
- » Lubrication-free bearings
- » Easy adjustment

## **OTHER FEATURES**

- » Three-chamber design
- » One-piece seamless diaphragm
- » EZ-VU adjustment port
- » AMR/AMI compatible

### Meets applicable standards

» ANSI B109.1

## **Design Simplicity**

The accompanying photo shows the inherent simplicity of the Itron three-chamber design: one valve seat, one valve cover, one main shaft and one tangent crank. Itron gas meters contain fewer critical links, rods, bearings and other moving parts.



Component	Material
Top Casting, Side Castings, Center Casting	Die Cast Aluminum
Gaskets	Cork/Neoprene
Valve Cover / Seat	Phenolic
Main Shaft, IDM shaft, Flag Shaft	Stainless Steel
IDM Housing	Nylon
Boot Seal	Nitrile
Diaphragm	Nitrile Rubber
Diaphragm Plate (Center)	Aluminum
Diaphragm Plate (Side Cover)	Tin
Carrier Wire	Zinc Plated Steel
Center Bracket	Nylon - Glass Filled
O-Rings	Nitrile
Handhole Cover	Stamped Steel
Displacement Adjustment Screw	Nickel Plated Steel
Timing Adjustment Screw	Brass
Index Driving Male Dog	Brass
Index Cover (w/ RTV)	Polycarbonate

### Hex bushing

» In the valve cover to provide self alignment and ensure consistent orbiting of the valve cover

### **2** Wearless orbital valve seat

» Enables mainshaft and tangent crank to be replaced without removing the valve seat

### 3 Mainshaft and tangent crank

» One-piece construction minimizing assembly variations

### 4 Lubrication-Free bearings

» Ensure long maintenance-free operation

## 5 Carrier bracket

» Engineered with tongue and groove design allowing for consistent and precise positioning of wires

### **6** Temperature compensation (optional)

» Located in the main measurement chamber for more prompt response to changes in temperature

# **SPECIFICATIONS**

	I-250
Meter Capacity	250 CFH Natural Gas @ .5 inch w.c. Differential 400 CFH Natural Gas @ 1.0 inch w.c. Differential
Hub Center-to-Center	6"
Hub Sizes	1A Sprague Standard, 10 LT, 20 LT, 30 LT, 1-1/4"
Meter Type	(TC) Temperature Compensated or (NTC) Non-Temperature Compensated
Units	Imperial (Cubic Feet - ft <sup>3</sup> ) or Metric (Cubic Meters - m <sup>3</sup> )
Index Drive	2 ft <sup>3</sup> /revolution or 50 cubic decimeters/revolution
Proving / Test Dials	ft³ - $\frac{1}{2}$ ' and 2' Proving Dials or m³ - 10 dm³ and 50 dm³ Proving Dials
Tangent Crank	9 revolutions/ft <sup>3</sup> or .111 ft <sup>3</sup> /revolution 3.2 revolutions/dm <sup>3</sup> or .31 liters/revolution
Indexes	4 Circle Dial (ft <sup>3</sup> - Standard Pressure, 2 PSIG) 4 Digit Direct Read (ft <sup>3</sup> - Standard Pressure) 5 Digit Direct Read (ft <sup>3</sup> or m <sup>3</sup> - Standard Pressure) Standard = 7 inches w.c.
Meter M.A.O.P.	5 PSIG (10 PSIG optional)
Meter Operating Temperature Range	-30°F to +120°F -34°C to +49°C
Surface Treatment	ASA 49 Gray Polyester Powder Coat

# DIMENSIONS

Imperial - Inches											
Model	Α	<b>B1</b>	<b>B2</b>	C1	C2	D	E1	E2	F	G	Wt. (lbs)
1-250	6.0	9.5	8.0	14.4	-	8.2	8.1	-	9.5	4.1	9.5
I-250 with 100G	6.0	9.5	8.0	14.4	14.1	8.2	-	9.1	9.5	4.1	10.2

## **Metric – Millimeters**

Model	Α	B1	B2	C1	C2	D	E1	<b>E</b> 2	F	G	Wt. (kg)
I-250	152	240	203	365	-	208	207	-	240	104	4.3
I-250 with 100G	152	240	203	365	358	208	-	231	240	104	4.6

I-250 with 100G DLS Datalogging ERT® Module

All dimensions and weights provided are approximate

# I-250



	Meters per Layer	Layers per Pallet	Meters per Pallet	Pallet Dimensions	Pallet Weight (Ibs)
I-250	20	3	60	44" x 41" x 50"	670
I-250 with 100G	16	3	48	44" x 41" x 50"	604

All dimensions and weights provided are approximate

### **CAPACITY & PRESSURE LOSS\***



# **ACCELERATED LIFE TEST\***



\*Individual meter performance may vary

#### **AMR/AMI COMPATIBLE**

The I-250 is compatible with leading AMR/ AMI devices.



Shown with 100G DLS Datalogging ERT® Module

## **ADDITIONAL INFORMATION**

- » 3-Chamber Meter Adjustment (TDC-0848-XXX)
- » Diaphragm Type Gas Meters Installation Procedure (TDC-0841-XXX)
- » Diaphragm Meter Product Line (TDC-0858-XXX)
- » I-250 Parts List (TDC-1412-XXX) \*\*Use most current publication revision.



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