### Sonix Gas Meters

Sonix2000

With its compact size and simple, no-moving parts design, Sonix offers unprecedented levels of accuracy, reliability, and performance available in no other gas meter – all backed by the industry's best warranty.

The Sonix2000 is an ideal choice for commercial and industrial applications with capacity requirements up to 3000 cfh. With no moving parts, Sonix requires less maintenance and is not susceptible to stoppage or damage from freezing, piping stress, or particulates in the gas line. And unlike rotary meters, the Sonix digital platform includes a host of built in self-diagnostic and monitoring capabilities including on-board temperature and pressure compensation capabilities as well as data logging.



# **Specifications**

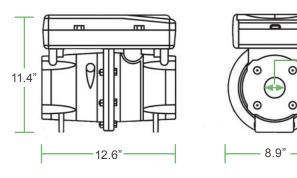
| General           |  |
|-------------------|--|
| Meter Type        | Single path ultrasonic   |
| Connections       | 2" ANSI 125 flat faced flanged   |
| Mounting          | inlet left, right, top, bottom   |
| MAOP              | 60 psig operation (175 psig containment)   |
| Temperature Range | -30° to +130°F ±1% correction  |
| Temperature Range | -30° to +150°F ambient   |
| Gas Application:  | Clean, dry natural gas insensitive to liquid,<br>particulate, and freezing; gases with specific gravity<br>between 0.6 (Natural Gas) and 1 (air) |
| Flow Conditioning | No filter/flow conditioning required   |
| Rangeability      |  |
| Capacities        | 2000 cfh at ΔP of 0.5" w.c.<br>40:1 (±1%: 50 - 2000 cfh)<br>200:1 (±2%: 10 - 50 cfh)   |
|                   | 3000 cfh at ΔP of 1.3" w.c.<br>60:1 (±1%: 50 - 3000 cfh)<br>300:1 (±2%: 10 - 50 cfh)   |
| Low Flow Cutoff   | 2.0 cfh  |

| Features                       |   |  |
|--------------------------------|---|--|
| Warranty                       | 15 years meter; 10 years battery  |  |
| Diagnostics                    | Meter health, tampering, reverse flow and air in the meter  |  |
| Temperature<br>Compensation    | Internal thermistor   |  |
| Pressure<br>Compensation       | Optional internal transducer or fixed factor  |  |
| Proof Verification             | Compatible with rotary transfer provers   |  |
| Data logging                   | Hourly for 60 days  |  |
| Communications                 |   |  |
| Optical Reading<br>Port        | Requires optical probe and SONIXCOM software  |  |
| Pulse Type                     | Two configurable Form A outputs (corrected and uncorrected pulse or index volume and alarm pulse)   |  |
| Pulse Duration                 | 50ms  |  |
| Pulse Rate                     | User scaleable 1 or 10 cu ft/pulse; 100 or 1000 cu ft/pulse or liter/pulse  |  |
| AMR Type                       | Any Form A pulse collector  |  |
| Regulatory Standards/Approvals |   |  |
| Safety                         | CSA C22.2 No 213-M1987, First<br>Edition: Non-incendive Electrical<br>Equipment for Use in Class I, Div.2<br>Hazardous Locations                        |  |
|                                | UL1604, Third Edition, Rev. 2/3/04:<br>Electrical Equipment for Use in Class<br>I and Class II, Div. 2, and Class III<br>Hazardous Classified Locations |  |
| Metrology                      | Measurement Canada AG-0577 to PS-G-06   |  |



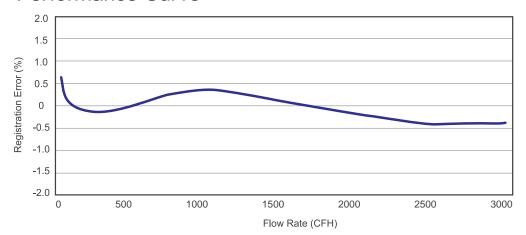
## Specifications

| Physical and Power |  |
|--------------------|--|
| Display            | 3/8" LCD index; 4, 5, or 6 digits with 3 digit alarm/high resolution index |
| Case               | 383 aluminum alloy   |
| Dimensions         | 11.4" x 12.6" x 8.9"   |
| Weight             | 28.6 Lbs.  |
| Voltage            | 7.2 vDC  |
| Battery            | Field replaceable dual "D" cell lithium thionyl chloride                   |
| Flash memory       | Permanent information retention without power                              |

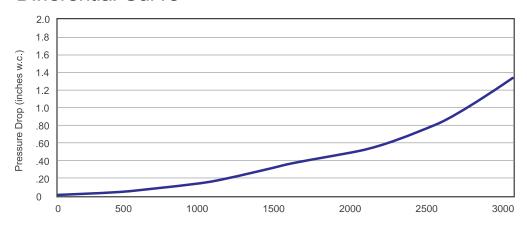


\*2.0" flanged per ANSI B16.19; holes on 4.75" bolt circle - 5/8" x 11 UNC 15/16" deep.

### Performance Curve



### **Differential Curve**



Sonix2000 gas meters are also designed in accordance with the following standards:

## Construction and Performance

- Construction to relevant sections of:
  - OIML R6:1989 General Provisions for Gas Volume Meters

2.0"\*

- ANSI B109.2 Diaphragm Type Gas Displacement Meters
- Measurement Canada PS-G-06 approval AG-0577

#### **Ingress Protection**

• NEMA 3R enclosure rating (IP22)

#### **Immunity (Magnetic and Radiated)**

- IEC 61000-4-8:1993 for Magnetic Immunity
- IEC 61000-4-3:1995 for Radiated Immunity.

#### Vibration and Shock

• IEC 60068/2-6 and IEC 60068-2-31

#### **EMC Emissions**

 Title 47 of the CFR, Part 18 Subpart C – 18.309(a) and 18.311 Radiated Emission Limits for Industrial, Scientific, and Medical (ISM) Equipment, Ultrasonic Devices.

#### Communications

 BS EN 62056-21: 2002, Data Exchange for Meter Reading, Tariff and Load Control - Direct Local Data Exchange

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