

Portable Ultrasonic Flow meter

Features

- Accuracy +/- 1.0% of reading; repeatability +/- 0.3% of reading; linearity +/-1.0% of reading
- Flow range 0 to 40 ft/s (0 to 12 m/s)
- Wide measurement temperature range -40°F to +176°F (-40°C to 80°C)
- One meter for a wide range of pipe sizes 1.0" to 48" (25mm to 1200mm)
- 11.1V rechargeable lithium battery (continuous operation for 16 hours)
- Analog output 4 to 20 mA (max 750 ohms)
- NEMA 13 (IP 54) transmitter with tactile entry keys and 64 x 128 alphanumeric backlit LCD; weight 1 kg
- Ambient conditions 14°F to 122°F (-10°C to 50°C). 0 to 99% relative humidity (non-condensing)
- Encapsulated transducers; IP 68 with 16.4 ft (5m) standard cable
- 2 gig SD memory card for high capacity data logging (512 files max; interval 5 to 60 seconds)
- Lightweight and easily transportable
- Low installation effort and costs
- Clamp-on sensors require no pipe cutting or process interruption and no plant shut-down
- Magnetic sensor clamping fixture with slip-scale gage
- Hygienic measurement, no risk of contamination, suitable for ultra clean liquids
- Cost advantages when used with large diameter pipes, high pressure systems, etc
- Measurement is independent of fluid conductivity meaning a wider applicability than magnetic meters



For information online...

www.sierrainstruments.com

Innova-Sonic® Portable Model 210i



Description

Sierra's next generation Innova-Sonic 210i ultrasonic flow meter succeeds at delivering portability and expanded functionality at significantly reduced cost.

The 210i is ideal for precisely measuring a wide range of liquid flows and temperatures. Our universal transit-time meter features a pushbutton interface, ergonomic handheld design and a large digital display that significantly simplifies set-up and data collection. And its high-powered ultrasonic pulse with improved digital signal processing requires just one set of transducers for a wide range of pipe sizes and materials including metal, plastic and concrete.

The 210i provides a powerful and extremely user-friendly programming menu that includes instantaneous flow rate, positive total, negative total, net total, velocity, date & time, and daily flow results. Its 2 gig SD memory card promises high capacity data logging and its rechargeable lithium battery supports continuous operation for a minimum of 16 hours.

A fully field portable, lightweight, yet rugged and totally self-contained flow measurement package, the Sierra 210i comes standard with a sturdy and convenient pelican carrying case, non-invasive clamp-on transducers installed into compact mounting racks (magnetic & cable mount), coupling compound and a start-up CD. And it's easy to use. It sets up in five minutes or less.

While principally designed for clear liquids, the 210i operates effectively with the minimal quantity of air bubbles or suspended solids found in most industrial applications.



Performance Specifications

Flow Range: 0 to +/- 40 ft/s (0 to +/-12 m/s)

Accuracy: +/- 1.0% of reading

Repeatability: +/- 0.3% of reading

Linearity: +/-1.0% of reading

Pipe Size: 1.0" in to 48" (25mm to 1200mm)

Operating Specifications

Output:

Analog: 4 to 20mA (max load 750Ω)

Power Supply: 11.1V rechargeable lithium battery (continuous operation of 16 hours)

Keypad/Display: Tactile keys with 64 x128 alphanumeric backlit LCD

Ambient Temperature: 14°F to 122°F (-10°C to 50°C); up to 99% relative humidity (non-condensing)

Fluid Temperature: -40°F to 176°F (-40°C to 80°C)

Physical Specifications

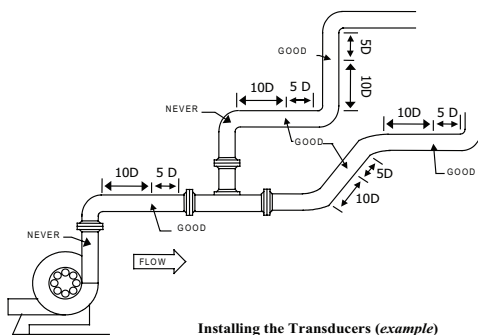
Transmitter: NEMA 13 (IP 54)

Transducer: Encapsulated design, IP 68. Standard cable 16.4 ft (5 m)

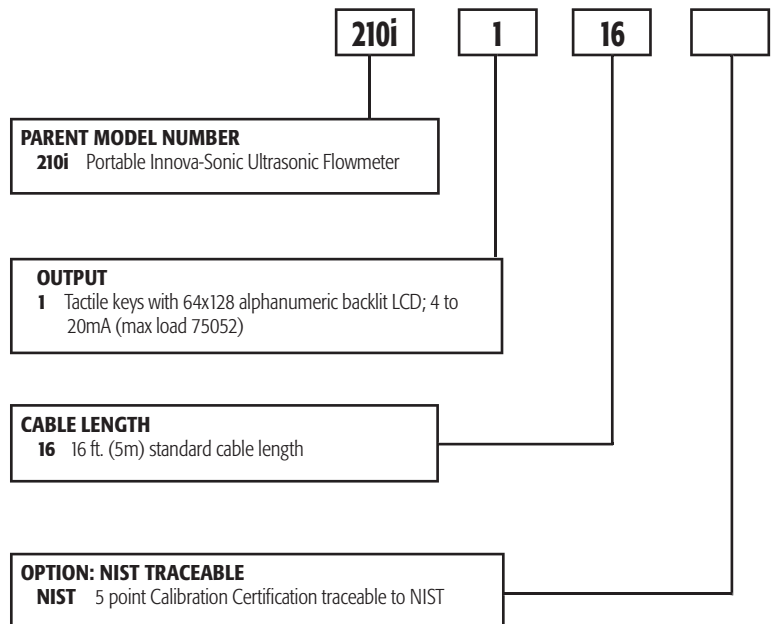
Electronics Dimensions: 7.8" (19.5cm) H x 5.3" (13.5cm) W x 1.4" (3.5cm) D

Weight: 2.2 LB (1.0 kg)

Installation Examples

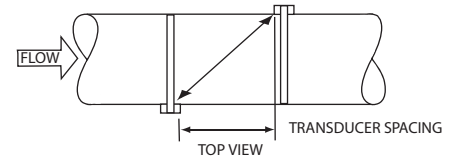
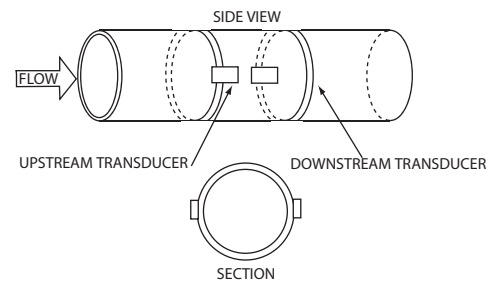


Installation Examples



Transducer Spacing Requirements

Z Method



V Method

