

Model 787 Portable Clamp-On Transit-Time Flowmeter



About Accusonic®

Accusonic® Technologies, a division of ADS® LLC, designs and manufactures ultrasonic transit-time flow measurement systems that are renowned for their precise accuracy and reliability in difficult operating environments. Accusonic flowmeter systems can be found in hydroelectric plants, thermal power plants, water and wastewater treatment facilities, sewage collection systems, and other types of water flow conveyance pipelines and channels. With over 35 years of experience and over 2500 systems installed worldwide, Accusonic offers a full range of services including installation, system integration, turbine performance testing services, and field training.

SYSTEM DESCRIPTION

The Accusonic® Model 787 Portable Clamp-On Transit-Time Flowmeter is a flexible and accurate instrument. It allows users to conveniently measure the flow of liquids in full pipes for a variety of purposes including temporary measurement of un-metered locations, existing flowmeter verification, plant surveys, and pump or valve diagnostics.

The Model 787 has a simple menu prompting meter configuration program that makes it easy to install and operate. It has a long battery life, is small in size, and is a perfect compliment to the existing Accusonic flowmeter product offering. This includes the Accusonic Model 7510+ Multiple Path/Channel Transit-Time Flowmeter for full pipes and open channels and the Model 7500 Multiple Path/Channel Transit-Time Networked Flowmeter for full pipe applications.

UNIQUE FEATURES OF THE MODEL 787

Portability

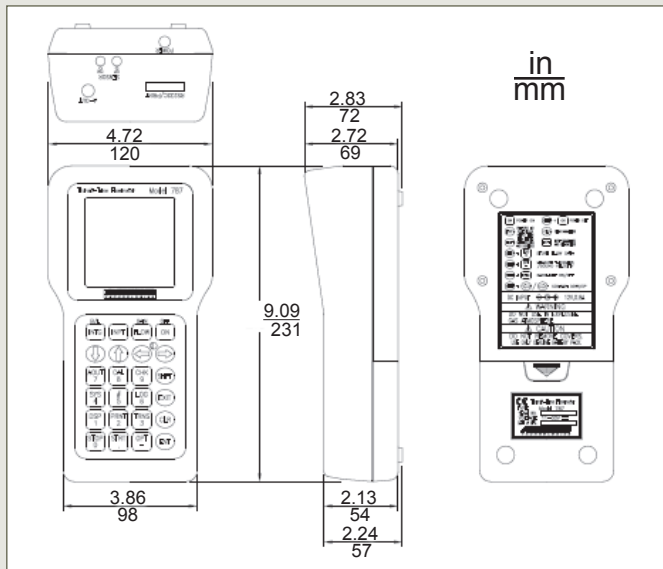
- The small yet rugged flowmeter enclosure allows easy transportation and handling in the field.
- The 7.5 hour battery life eliminates the need to access AC power during field use.
- Only three transducer types are required to cover the entire pipe size range of 0.5 to 200 inches (13 to 5000 mm) minimizing the amount of equipment needed for field measurements. In most cases, only one or two transducer types may be required for most portable survey projects.

Enhanced Features

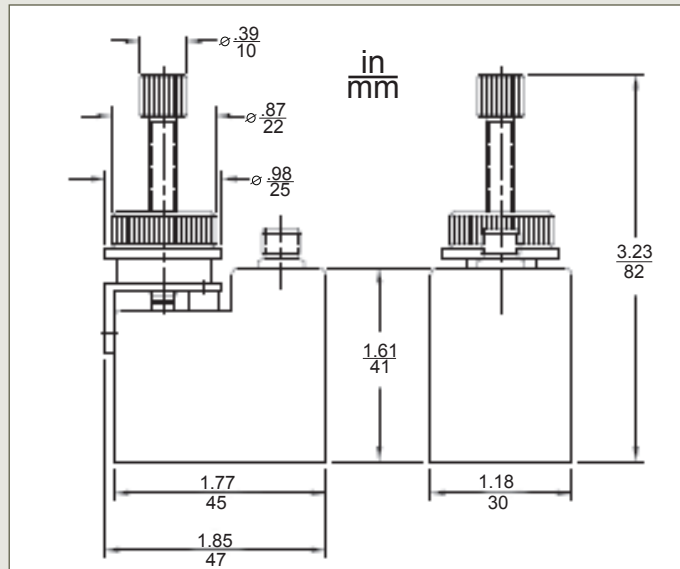
- Soft and hard carrying cases for convenience
- Multiple site storage ability
- Thickness Gauge – Allows for field verification of pipe wall thickness increasing the overall performance capability of the meter by eliminating dimensional uncertainties

ACCUSONIC®
TECHNOLOGIES

SYSTEM SPECIFICATIONS



Model 787 Flowmeter



Standard Transducers

Number of Acoustic Paths: Single Path

Number of Channels: Single Channel

Accuracy: +/- 1 to 2% typical

Liquid Temperature Range: -4 to 175°F (-20 to 80°C)

Pipe Material:

- Sonically conductive including carbon steel, stainless steel, ductile iron, cast iron, alloys, plastic, copper, etc.

Pipe Wall Liners:

- Cement mortar, coal tar epoxy, etc., integrally bonded to the pipe wall

Pipe Diameter Range:

- Small Pipe Transducer 0.5 to 4" (13 to 100mm)
- Standard Pipe Transducer 2 to 20" (50 to 500mm)
- Large Pipe Transducer 12 to 200" (300 to 5000mm)

Velocity Range: +/- 65 ft/sec (+/- 20m/sec)

Outputs:

- One, 4 – 20 mADC with 600 ohm max impedance load
- RS-232C Interface

Datalogger: 55,000 data points

Display: 128 x 128 dot matrix with backlight

Power Requirement:

- 100 - 230 VAC, 50-60 HZ
- 12 VDC
- 3 to 10 watts power consumption
- Internal battery - 7.5 hours with 4 hour recharge time

Enclosure: Rugged Ergonomic

Environmental Conditions:

- Operation: 15 to 120°F (-10 to 50°C), 0 to 90% RH

Accessories:

- Pipe Wall Thickness Gauge
- Rugged Carrying Case

Enclosure Dimensions:

- 9.1" d x 2.8" h x 3.85" w (230.8 x 71.6 x 98mm)
- 2.9 lb. (1.3 kg)