

Portable Ultrasonic Flowmeter



Product Description:

When permanent installation is not required, portable ultrasonic flowmeter can provide extended functions and field portability. Monitor liquid flow from site to site freely. Comes a complete liquid measurement kit with a portable clamp sensor, a small hand-held display interface, bright color display and touch buttons.

Although the portable meter is primarily designed for cleaning liquids, it can still operate effectively with minimal bubbles or suspended solids found in most industrial applications. Its high-power ultrasonic pulses have improved digital signal processing capabilities, and can be used for various sizes of pipes and materials, including metals and plastics, with only a set of transducers. The hand-held battery-powered is ideal for accurately measuring various liquid flows in pipes up to 6000 mm (approximately 240 inches).

The portable hand-held flowmeter uses a universal transit-time technique, which can measure the time it takes for the ultrasonic signal to travel a known distance along the flow and the time it takes for another signal to propagate in the opposite direction to the flow to determine the velocity of the fluid being measured. The measurement is not restricted by the conductivity of the fluid, and has wider applicability compared with electromagnetic flowmeters.

Specifications:

- Flow range: $\pm 0.03 \sim \pm 40$ ft/s ($\pm 0.01 \sim \pm 12$ m/s)
- Accuracy: $\pm 0.5\%$ of measured value
- Repeatability: 0.15%.
- Linearity: $\pm 0.5\%$.
- Pipe Size: 1" \sim 240" inch (25mm \sim 6000mm)
- Operating Temperature:
- Transmitter: 14°F \sim 122°F (-10°C \sim 50°C)
- Transducer: 40°F \sim 176°F (-40°C \sim 80°C)
- Operating Humidity: 0 to 99% RH, non-condensing
- Transducer: Encapsulated design, IP68;
- Standard cable length: 5m
- Weight Transmitter: approximately 1.0kg
- Power supply: Rechargeable Lithium Battery Power (continuous operation of main battery 10 hours)

Applications:

- Cooling and heating fluid measurement
- Water and wastewater measurement
- Leak detection in pipeline systems
- Monitor and control HVAC system
- Fuel and oil consumption measurement
- Calibrate other flow meters
- Automated process control

