



FLOWLINE
Instruments FZE
Towards Reliable Measurement

Ultrasonic Flowmeter

S 1000

Clamp On Portable Transit Time



S 1000

Clamp On Portable Transit Time Ultrasonic

Our Flowline New S1000 portable ultrasonic flow meter is designed by the principle of transit time method. The transit time type ultrasonic flow meter is equipped with two transducers that are clamped on the outside of a closed pipe at a specific distance

The two transducers which function as both ultrasonic transmitters and receivers. The flow meters operate by alternately transmitting and receiving a frequency modulated burst of sound energy between the two transducers. The burst is first transmitted in the direction of fluid flow and then against fluid flow. Since sound energy in a moving liquid is carried faster when it travels in the direction of fluid flow (downstream) than it does when it travels against fluid flow(upstream), a differential in the times of flight(ΔT) will occur.

The difference in the transit time measured is directly and exactly related to the velocity of the liquid in the pipe.

S 1000

The hand held/portable ultrasonic flow meter is the most popular flow measurement instruments, featured with low cost, high portability, high accuracy and non-intrusive. The compact, light-weight designing makes the hand-held flow converter truly portable.



Features

- **Flexible design Concept** Modular design offers better flexibility and ease of operation with high degrees of efficiency.
- **Accurate, cost-effective measurement** Advanced digital signal processing and superior sensor design offer economical and reliable flow measurement.
- **No Process Interruption** Clamp-on Sensors are capable of quick retro-fit at any point in the process allowing easy flow measurement and troubleshooting shooting.

Wide Application Range Suitable for a wide range of pipe sizes and materials including lined pipes for both conductive and non-conductive liquids.

- Economic, non-intrusive, flow measurement
- Easy set up and installation; no pressure drops, no moving parts
- Wide range of pipe sizes and materials suitable for lined pipes
- Velocity, volumetric and totalized flow
- Key pad for easy operation
- Data logger

Applications



- Potable water
- Sewage (with limited particle content)
- Seawater
- Wastewater
- Crude Oil
- Diesel
- Alcohol
- Discharge water
- Other liquids used in industrial applications
 - Power plants
 - Heat energy metering
 - Metallurgy and mines
 - Petroleum and chemicals
 - Food and Pharmaceutical
 - Marine Operations
 - Pulp and paper

Technical Specifications

Pipe Size	1" -48" (DN25mm-1200mm)
Accuracy	±1.0% of reading
Repeatability	0.3%
Velocity	±0.01~±6m/s ±0.03~±20ft/s, bi-direction.
Outputs	Analog output: 4~20mA, Max 750 Ω .
SD card	Storage: 8GB; Interval: 1 ~ 60 seconds
Power supply	rechargeable Lithium Battery Power (continuous operation of main battery 10 hours)
Display	3.5 inch TFT screen(320 × 240), backlit LCD.
IP Rating	Transducer: Encapsulated design, IP68; Transmitter: NEMA13 (IP54)
Cable	Standard cable length: 5m.
Temperature	Transmitter: -10°C ~50°C Transducer: -40°C ~80°C