SiteLab
Ultrasonic Flowmeter SL1278
available from
Procon Instrument Technology
SL 1278 Portable Ultrasonic Flowmeter enables the user to do flow measurement checks at many points in a flow process without the need for a permanent installation.

This universal transit-time meter features a dual-function push button interface, ergonomic handheld design and a beautiful 3.5in TFT backlit digital display that significantly simplifies setup and data collection.

Comparing with other traditional flow meter or ultrasonic flow meter, it has distinctive features such as high precision, high reliability, high capability and low cost, the flow meter features other advantages:

TVT technology designed. Less hardware components, low voltage broadband pulse transmission, low consumption power. Clear, user-friendly menu selections make flow meter simple and convenient to use.

Daily, monthly and yearly totalized flow. Parallel operation of positive, negative and net flow totalizes with scale factor (span) and 7 digit display, while the output of totalize pulse and frequency output are transmitted via relay and open collector.

About SL1278

Applications
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<td>±0.03 ~ ±40 ft/s (±0.01~ ±12 m/s)</td>
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<td><strong>Accuracy</strong></td>
<td>±1%</td>
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<td><strong>Repeatability</strong></td>
<td>0.3%</td>
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<td><strong>Linearity</strong></td>
<td>±1%</td>
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<td><strong>Pipe Size</strong></td>
<td>Clamp-on: 1” ~ 48” in (25mm ~ 1200mm)</td>
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Wiring Diagram

Transmitter Dimensions

Transmitter

Transducer

111mm

39mm

209mm

40mm

30mm

300mm
Transducer Installation Methods

V method measuring pipe size: 50mm-400mm

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<tr>
<th>Side View</th>
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<td><img src="upstream-transducer.png" alt="Side View" /></td>
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Top View

![Flow](flow.png)

Transducer space

Z method measuring pipe size: 25mm-1200mm

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Top View

![Flow](flow.png)

Transducer space
Installation Site Selection

When selecting a measurement site, it is important to select an area where the fluid flow profile is fully developed to guarantee a highly accurate measurement. Use the following guidelines to select a proper installation site:

Choose a section of pipe that is always full of liquid, such as a vertical pipe with flow in the upward direction or a full horizontal pipe.

Ensure enough straight pipe length at least equal to the figure shown below for the upstream and downstream transducers installation.

Ensure that the pipe surface temperature at the measuring point is within the transducer temperature limits.

Consider the inside condition of the pipe carefully. If possible, select a section of pipe where the inside is free of excessive corrosion or scaling.
### Ordering Information

#### Description

| SL1278 | Handheld Ultrasonic Flowmeter  
Installation method: Handheld  
8G SD card high memory data logging, maximum memorize 512 days data.  
Flow Range: ±0.03 ft/s ~ ±40 ft/s (±0.01 m/s~ ±12 m/s)  
Accuracy: ±1%  
Repeatability: 0.3%  
Output: 4-20mA  
Internal lithium power supply: 10hours  
Pipe size range: 1”~48”(25mm~1200mm)  
Transducer: IP54, CP magnet portable transducer, 5m cable |

#### Type of transducers

| P010 | P type magnet portable transducer  
Operating temperature: 40 ~176 (-40 ~80 ) |

#### Transducer Cable Length

| 016 | P type of cable Standard 16ft (5m)  
xx | Maximum lengthen to 305m, per 5m is a lengthen unit. |

Standard Model: P117-P010-016  
Description: Portable transducers, 5m cable.

#### Packaging

1. Carrying Case  
2. Flow Transmitter  
3. Transducer with scaled rack  
4. Pipe Circles  
5. Grease Coupling Compound  
6. SD Card

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Available from  
Procon Instrument Technology  
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