

## Solenvis SL110 - Low Cost Clamp-on Ultrasonic Flow/heat meter

Din rail mounted fixed type ultrasonic flow meter

Advanced transit-time technology for flow accurate measurement



### Description:

The low cost ultrasonic flowmeter is the latest innovation supplied by Solenvis. It employs cutting-edge technologies on ultrasonic transit-time measurement, digital signal processing and surface mounting electronics. It provides abundant capabilities for accurate liquid flow measurement from outside of a pipe. The proprietary signal quality tracking and self-adapting techniques allow the system to optimally adapt to different pipe materials automatically.

- This unit has four local keys which can be used for setting all parameters.
- This type of ultrasonic flowmeter can be equipped with an optional key board module.
- The users can either use the RS-485 interface or the display / keyboard interface to program the flowmeter.
- The transducer installation is also simple and no special skills or tools are required.
- Due to the non-intrusive nature of the clamp-on technology, there is no pressure drop, no moving parts, no leaks, no risk of contamination, no risk of corrosion, no pressure dependency.

### Features:

- 1) Very low cost and an ideal clamp-on ultrasonic flow meter for large quantity applications
- 2) High accuracy, better than  $\pm 1\%$
- 3) No-intrusive, no pipe disturbance, no risk of leakage, no moving parts, no pressure drop, low maintenance
- 4) Wide pipe size range: 1"-240" (DN25mm-DN6000mm)
- 5) Wide measurement range: 0.03-105ft/s (0.01-32m/s)
- 6) This ultrasonic flow meter is suitable for all common used pipe materials
- 7) This ultrasonic flow meter is also suitable for most pure liquids and liquids with minor particles
- 8) Large turn-down ratio
- 9) Easy clamp-on installing. No pipe cutting and no hole drilling. Save installing cost.
- 10) Built-in flow totalizers, batch controller and task scheduler
- 11) Isolated 8-36V DC power supply.
- 12) LCD backlight 2\*20 letters display
- 13) 4 local keys for all parameters setting
- 14) Versatile inputs/outputs, including 3 way 4-20mA input and 2 way OCT output (relay output) and one way 4-20mA output.
- 15) Can support both self-powered and loop-powered mode 4-20mA output. While self-powered, the power supply must be 24VDC.
- 16) Isolated RS485 interface with power surge protection, also supports MODBUS.
- 17) Optional thermal energy measurement
- 18) Automatically matches transducer to pipe materials and liquid with signal quality tracking and self-adaptation technology
- 19) Low power consumption, less than 0.5W at 9VDC
- 20) Small size only 90x90x32mm.

21) Clamp on high temperature ultrasonic flow transducers options also available.

**Application:**

This ultrasonic flow meter is designed for large quantity, low cost applications. Benefited from our innovate network interface technique, the ultrasonic flow meter is an ideal choice for industrial automation, processing monitoring, water source management, flow meter networking and OEM applications. It provides reliable measurement in both clean and opaque liquid flow.

Examples of applicable liquids are listed as below:

- Water, including cold water, hot water, chilled water, city water, sea water, etc.
- Sewage, waste treatment, etc.
- Oil, including crude oil, diesel oil, fuel oil, lubricating oil, etc.
- Chemicals, including alcohol, acids, etc.
- Beverage, food and pharmaceutical processors where non-contact is a must
- HVAC, energy measurement system, etc.
- Solvents

**Clamp on standard type ultrasonic flow transducers options:**

		
<ul style="list-style-type: none"> <li>• Standard S1 transducers</li> <li>• Pipe size: DN15-DN100mm</li> <li>• Protection class: IP68</li> <li>• Temperature: 0-70C</li> <li>• With magnetic sensors</li> </ul>	<ul style="list-style-type: none"> <li>• Standard M1 transducers</li> <li>• Pipe size: DN50-DN700mm</li> <li>• Protection class: IP68</li> <li>• Temperature: 0-70C</li> <li>• With magnetic sensors</li> </ul>	<ul style="list-style-type: none"> <li>• Standard L1 transducers</li> <li>• Pipe size: DN300-DN6000mm</li> <li>• Protection class: IP68</li> <li>• Temperature: 0-70C</li> </ul>