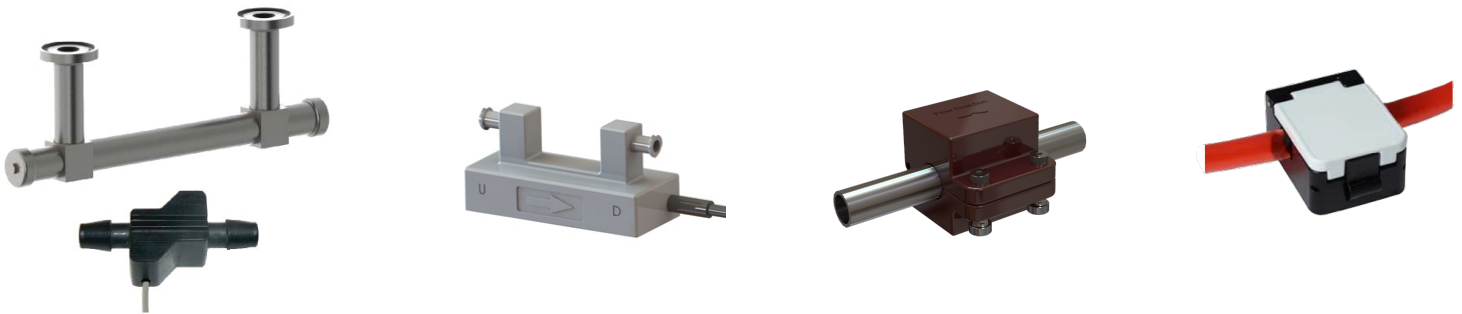


Custom Ultrasonic Flow Sensors

SMD Sensors ultrasonic flow meter systems are designed for measurements in tubes, pipes and blood vessels. Flow meter systems can handle flow rates from 1 mL/min to 1000 L/min or above with excellent turn down ratios and accuracy. The flow meter body can be stainless steel, Teflon, PEEK or another metal or plastic material to meet fluid compatibility requirements for different applications. The type of sensor is also an option, either in line (invasive) flow sensor or and clamp on (non contact) sensor, sensor type is typically dependant on your specific application needs. The flow meter system measurements are based on transit time difference measurement between upstream and downstream ultrasonic signals, which is proportional to flow velocity. The system has the capability to integrate temperature and pressure measurement options while measuring flow rate, accumulated flow volume, sound speed in liquid/gas, and signal strength.

Flow meter sensors are paired with SMD Sensors FlowDAQ module that electronically displays measurements in real time with a touch screen response. The default analog output for flow rate is 0-5 V, and +/-5 V and 4-20mA are optional. The touch screen shows information on flow and system settings, and allows zero calibration. The system can be connected to a computer through the UART serial port using a USB-Serial converter cable, and be configured using the system software. Instantaneous flow rate, flow history and ultrasonic wave form can be displayed on a computer screen graphically. Flow information can also be exported and saved as data files to further analysis. Approximately 90% of Strain Measurement Devices' products are custom designed: these sensors meet the more specialized needs of OEM's.



| <u>Specifications:</u> | |
|-------------------------------|----------------------------|
| Line Size: | 2 mm to 200 mm |
| Temperature: | 0-65°C (Typical) |
| Flow Range: | 1 mL/min to 1000 L/min |
| Display: | LCD Optional |
| Sensor Input: | 18 VSC (<120 mA) |
| Sensor Output: | Digital: RS485 (Typical) |
| | Digital: RS232 (Optional) |
| | Analog: 4-20 mA (Optional) |
| | Analog: 0-5 V (Optional) |

Applications:

- Medical/Bio Fluid
- Laboratory Tests
- Food & Beverage
- Semiconductor
- Waste & Waste Water
- Oil & Down hole
- OEM

Features:

- 1% Accuracy (Typical)
- 0.5% Repeatability (Typical)
- Bidirectional Measurement
- Bubble Detection
- Clamp-On or In-Line

Please Contact Us for All Your Custom Application Needs!

USA
 Strain Measurement Devices
 55 Barnes Park North, Wallingford, CT 06492
sales@smdsensors.com | (203) 294-5800

Europe
 Strain Measurement Devices
 Bury Road, Chedburgh, Bury St Edmunds IP29 4UQ
sales@smdsensors.co.uk | +44 (0)1284 852 000