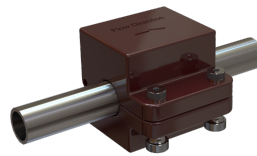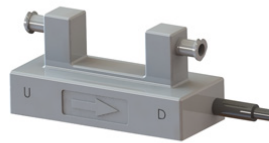# Custom Ultrasonic Flow Sensors

The FlowDAQ® ultrasonic flow meter system is designed for flow measurement in tubes, pipes and blood vessels. The system is based on transit time difference measurement between upstream and downstream ultrasonic signals, which is proportional to flow velocity. FlowDAQ® is compatible with most of Strain Measurement Devices Clamp-on and Inline ultrasonic flow sensors. The system integrates temperature and pressure measurement options and can measure flow rate, accumulated flow volume, sound speed in liquid/gas, and signal strength. The default digital output is through a UART serial port, but RS232 modules can be added upon request. The default analog output for flow rate is 0-5V, and +/-5V and 4-20mA are optional. The system is equipped with a 4.3" touch screen for display and control. 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. The flow-meter body can be a number of materials like, stainless steel, Teflon, PEEK, and other metals or plastics to meet fluid compatibility requirements for different applications. Approximately 90% of Strain Measurement Devices' products are custom designed: these sensors meet the more specialized needs of OEM's. Strain Measurement Devices' engineering team can design a sensor for your unique requirements.

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

Specifications:	
Line Size:	2 mm to 200 mm
Temperature:	0-65°C (Typical)
Flow Range:	1 µL/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)

Please Contact Us for All Your Custom Application Needs!