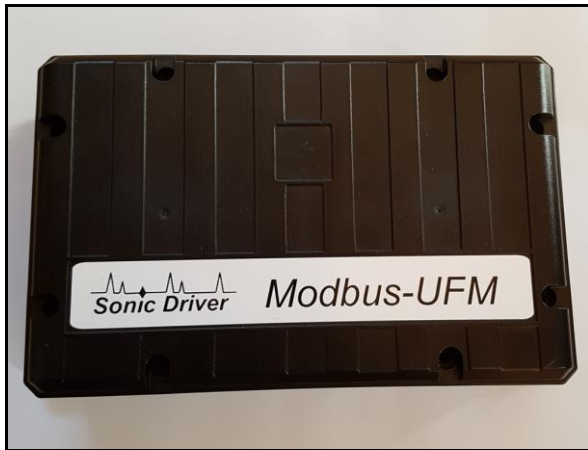




MODBUS WALL-UFM

Fixed installation, wall or panel mountable clamp-on ultrasonic flowmeter.



The MODBUS WALL-UFM is a fixed installation, wall or panel mountable clamp-on ultrasonic flowmeter. It is installed and commissioned using a laptop computer running a configuration program (Windows).

Once commissioned the UFM can be connected to a Modbus RTU RS485 network and back to a control room or Cloud based monitoring applications.

The UFM incorporates heat quantity measurement functionality.

The UFM can accept up to 4 optional plug-in IO modules.

Specification

- Available in 3 competitively priced pipe outer diameter ranges:
 - 10 to 115 mm.
 - 115 to 225 mm.
 - 225 to 6500 mm.
- Temperature range for control unit -10 to +65 degC.



Made in Britain

- Weight 700 g.
- Dimensions 270 x 150 x 80 mm.
- IP68 enclosure.
- 12 to 24 Vdc PSU at 10 W.

Features

- Intuitive installation and commissioning using configuration program running on a PC.
- Full set of measured values and instrument and measurement diagnostics available over Modbus RTU RS485.
- Signal oscilloscope for sensor positioning and diagnostics.
- Internal database of pipe and fluid materials.
- Fluid database of sound speed, density and viscosity compensated for fluid temperature (if temperature is known from optional PT100 input)
- Heat quantity measurement (if inlet and outlet temperatures are known from optional PT100 inputs).
- Positive, negative and net flow totalisers (l).
- Optional Open Collector pulse output on net total.
- Optional Alarm relay output.
- Optional 4 to 20 mA output.
- Heat measurement designed to comply with EN1434-1 Section 8 and its Appendix A.

Performance

- Measurement principle ultrasonic transit time difference.
- Flow velocity range 0.01 to 25 m/s.
- Resolution 0.25 mm/s.
- Repeatability 0.15 % of measured value.
- Accuracy +/- 0.5 to +/- 3.0 % of measured value for velocity greater than 0.2 m/s, depending on application.
- Turn down ratio 1/100.
- Measurement rate 1 Hz as standard.
- Gas/solids < 10 % of volume.

Quantity and units of measurement

- Flow velocity (m/s)
- Volumetric flow rate (l/min)
- Mass flow rate (kg/min)
- Energy flow rate (KJ/s)
- Inlet temperature (degC)
- Outlet temperature (degC)
- Flow positive total (l)
- Flow negative total (l)
- Flow net total (l)

Optional plug-in IO modules

- Galvanic and optical isolation.
- Namur levels for signalling.
- 16-bit resolution.
- Active 4 to 20 mA current output.
- Passive 4 to 20 mA current output.
- Alarm Relay (NO and NC) output.
- Open Collector pulse output.
- PT100 input (4 wire).

Transducers

- A range of sensor frequencies and sizes to cover the range of pipe outer diameter 10 to 6500 mm (specify with order).



- Material stainless steel and PEEK.
- Temperature range -10 to +80 degC standard.
- Ingress Protection rated IP54, with IP68 option.
- Cable length 3 m as standard.
- Matched pairs for accurate zero flow measurement.

For more information or to arrange a demonstration please contact Sonic Driver by email enquiries@sonic-driver.com, telephone +44(0)7971 273000 or by post at the address shown at the bottom of this page.

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