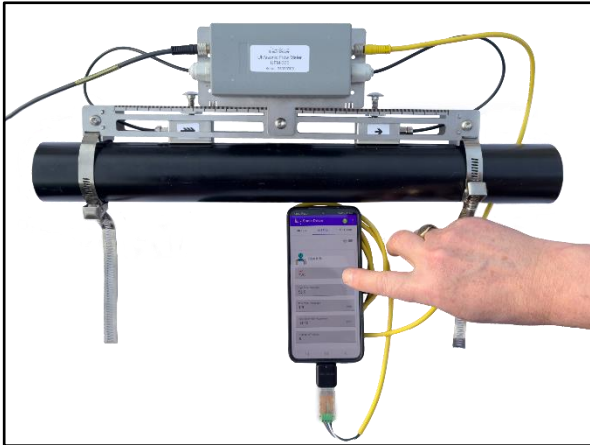




UFM-300

Fixed installation; guide-rail, pipe, wall, or panel mountable Clamp-on ultrasonic flowmeter.



The UFM-300 is a fixed installation; guide-rail, pipe, wall, or panel mountable Clamp-on ultrasonic flowmeter, which can be installed and commissioned using a Smart phone App (Android only) or a laptop computer running a configuration program (Windows).

Once commissioned the UFM-300 can continue to be operated locally as above or simply switched between local and remote operation via a Modbus RTU RS485 network for control room or Cloud based monitoring applications.

When connected to a third-party Modbus enabled datalogger the UFM-300 is ideal for remote measurement in isolated areas. Its low power operating mode means it can be powered from the datalogger for extended periods.

A complete Modbus register map is available and allows the user to locally or remotely program, interrogate and take measurements from the UFM-300.



Made in Britain

Specification

- Available in 2 competitively priced outer pipe diameter ranges:
 - 10 to 115 mm.
 - 115 to 225 mm.
- Temperature range for control unit -10 to +65 deg C.
- Weight 300 g including sensors but excluding mounting.
- Dimensions 120 x 60 x 30 mm.
- IP54 enclosure.
- 5 or 12 to 24 Vdc PSU options at 10 W.

Features

- Intuitive installation and commissioning using configuration program running on a Smart phone (Android only) or a laptop (Windows)
- Full set of measured values and instrument and measurement diagnostics available locally and 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.
- Instantaneous flow velocity, volumetric and mass flow rate measurement.
- Flow positive, negative, and net totalisers.

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)
- Flow positive total (l)
- Flow negative total (l)
- Flow net total (l)

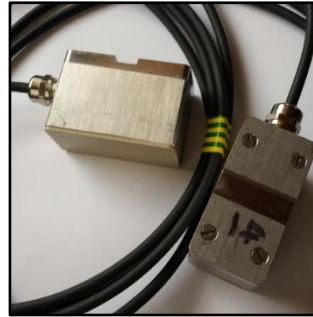
When using the Smart phone App the meter will additionally display flow velocity in ft/s and volumetric flow rate in; m³/hr, GPM, GPH and ft³/min

Internal database

- **Pipe materials**
 - Carbon steel
 - Stainless steel
 - Copper
 - PVC
 - Cast Iron
 - Ductile Iron
 - HDPE
- **Fluids**
 - Water
 - Petrol
 - Diesel
 - Glycol-Water

Call to discuss other options.

Sensors



- DM10 sensors cover the range of pipe outer diameter 10 to 225 mm.
- Material stainless steel and PEEK.
- Temperature range -10 to +80 deg C.
- Ingress Protection rated IP54, with IP68 option.
- Cable length as standard:
 - 1.5 m pipe mount.
 - 3.0 m wall and panel mount.
- Matched pairs for accurate zero flow measurement.

Flowmeter mounting options

- Guide-rail
- Pipe bracket
- Wall or Panel mount bracket

For more information or to arrange a demonstration please contact Sonic Driver by email enquiries@sonic-driver.com or call +44(0)7971 273000

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