



## Ultrasonic Flow Transmitter

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



The Ultrasonic Flow Transmitter (UFT) is a fixed installation; pipe, 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 UFT can be connected to a Modbus RTU RS485 network and back to a control room or Cloud based monitoring applications.

When connected to a third party Modbus enabled datalogger the UFT 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 program and interrogate and take measurements from the UFT.



**Made in Britain**

## Specification

- Pipe outer diameter range 10 to 750mm.
- Temperature range for control unit -10 to +65 degC.
- Weight 300g including sensors.
- Dimensions 120 x 60 x 30mm.
- IP68 potted enclosure.
- 5 or 12 Vdc PSU options at 10W.

## 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.

## Performance

- Measurement principle ultrasonic transit time difference.
- Flow velocity range 0.01 to 25m/s.
- Resolution 0.25mm/s.
- Repeatability 0.15% of measured value.
- Accuracy +/- 1 to 3% of measured value depending on application, +/- 0.5% of measured value with process calibration against reference meter.
- Turn down ratio 1/100.
- Measurement rate 1Hz 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)

## 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.

## Transducers



- DM10 sensors cover the range of pipe outer diameter 10 to 750mm.
- Material stainless steel and PEEK.
- Temperature range -10 to +80 degC.
- Ingress Protection rated IP66, with IP68 option.
- Cable length 1.5m 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](mailto: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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