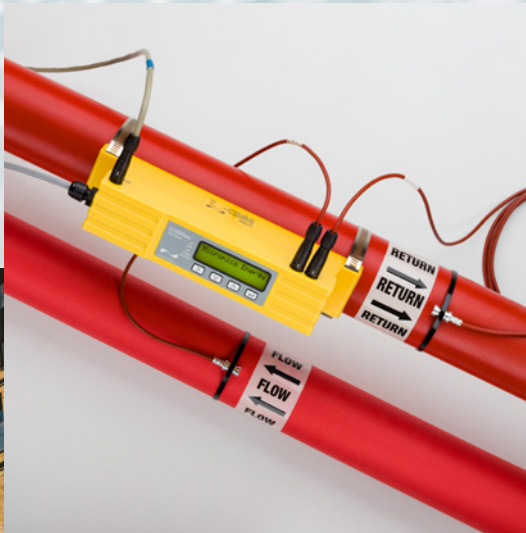# ULTRAFLO U1000MKII-HM

THE THERMAL, HEAT/ENERGY METERING SOLUTION FROM MICRONICS. SIMPLE, LOW COST, HOT OR CHILLED WATER ENERGY MEASUREMENT FROM OUTSIDE THE PIPE. A SMARTER SOLUTION THAN IN-LINE METERS!

NEW!
Pipe range has been extended to 6" pipes.

MADE IN BRITAIN

The U1000MKII-HM is an ultrasonic clamp-on thermal, heat/energy meter that uses ultrasound to measure flow rate and PT100 temperature sensors to measure flow and return temperatures. The U1000MKII-HM displays energy rate and totalised energy with pulse output and communication options, so it can be used as a standalone meter or as an integral part of an aM&T or BEM's system.

Simple to install – connect power and enter the pipe inside diameter, adjust the sensors and clamp-on the pipe – no specialist skills or tools required!

For further information call us on
+44 (0)1628 810456
or email **sales@micronicsltd.co.uk**
www.micronicsflowmeters.com

micronics
Through measurement comes control

U1000MKII-HM – Fixed Ultrasonic Heat/Energy Meter with Modbus and Mbus Communication options

SPECIFICATION

Measurement Technique: Ultrasonic transit time method for flow measurement and PT100 Class B 4 wire for temperature measurement.

Turn Down Ratio: 200:1

Heat Meter Standard: The Heat/Energy calculation is designed to comply with EN1434 section 6.

Accuracy: +/- 1% – 3% of flow reading for >0.3m/s (1 ft/s).

Flow Velocity Range: 0.1m/s – 10m/s (0.3 ft/s – 32 ft/s).

Pipe Range: Available in 2 options. 22mm to 115mm and 125mm to 180mm OD.

Note Pipe size is dependent on pipe material and internal diameter.

Water Temp Range: 0°C – 85°C (32°F – 185°F).

Temperature sensors: Clamp-on PT100 Class B 4 wire, range 0°C – 85°C (32°F – 185°F), resolution 0.1°C (0.18°F). Minimum delta T is 0.3°C.

Output: Pulse or Frequency.

Pulse for Volume flow and Energy in kWh(BTU).

Frequency for flow rate.

The pulse output can be configured as a loss of signal or low flow alarm.

Modbus Communication: Optional Modbus RTU slave, RS485 serial link hardware layer. Energy, power, temperature and flow. Modbus connection cable is 1m.

Mbus Communication: pending.

External Power Supply: 12V – 24V +/- 10% AC/DC at 7 watts per unit. Optional plug in 12V power supply.

Electronics Enclosure: IP54.

Input/Output Cable: 5m x 6 core for power in and pulse out

Dimensions: 250mm x 48mm x 90mm (10" x 2" x 4") (electronics + guide rail).

INDUSTRIES:
- Energy Management
- Building Services

RECOMMENDED FOR:
- Hot water < 85°C (185°F)
- Chilled water
- Chilled water with glycol
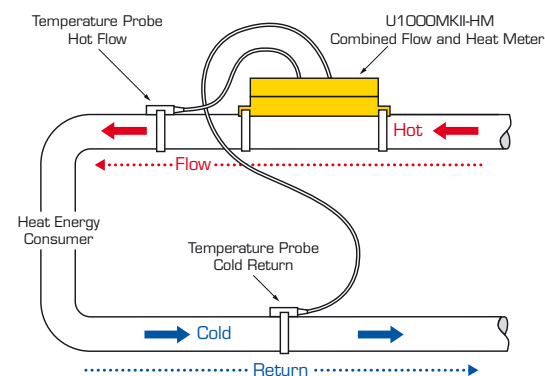
APPLICATION/USE:
- Heat/energy metering in energy management or building services applications for LTHW or chilled water circuits.

PIPE MATERIALS:
- Steel, Stainless Steel, Plastic and Copper

CONTACT YOUR MICRONICS DEALER:

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