### **ULTRAFLO U1000MKII-HM**





# NEW!

Pipe range has been extended to 6" pipes.





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 (O)1628 810456 or email sales@micronicsltd.co.uk





## **ULTRAFLO U1000MKII-HM**

# **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

 $\textbf{Heat Meter Standard:} \ \textbf{The Heat/Energy calculation is designed to comply with} \\$ 

EN1434 section 6.

**Accuracy:**  $\pm$  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  $0^{\circ}$ C -  $85^{\circ}$ 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.

 $\mbox{\bf Input/Output Cable:}~5m\ x\ 6$  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.

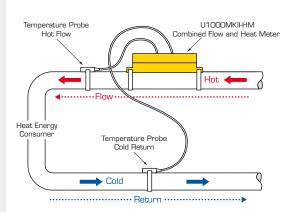
#### **PIPE MATERIALS:**

Steel, Stainless Steel, Plastic and Copper

Micronics Limited accepts no responsibility or liability if this product has not been installed in accordance with the installation instructions applicable to the product.

 $\label{eq:micronics} \mbox{Micronics reserve the right to alter any specification without notification.}$ 







#### CONTACT YOUR MICRONICS DEALER:

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