Micronics™

Water / Waste Management

Manufacturing

# Clamp On Flow Meters

**Precision You Can Trust. Performance You Can Measure.**

Oil & Gas

Energy

www.ClampOnFlow.com

Accurate & Reliable Process Instrumentation

# PF333 / PF222 Series


**PF 333**


**PF 222**

**INDUSTRIES:**
- WATER
- BUILDING SERVICES
- ENERGY MANAGEMENT
- POWER GENERATION
- OIL & GAS
- PETROCHEMICAL
- CHEMICAL
- PHARMACEUTICAL
- FOOD

**RECOMMENDED FOR:**
- POTABLE WATER
- RIVER WATER
- COOLING WATER
- DEMINERALISED WATER
- WATER/GLYCOL SOLUTIONS
- HYDRAULIC OIL
- DIESEL AND FUEL OILS
- CHEMICALS
- PETROLEUM PRODUCTS
- PRODUCED WATER

## PORTABLE, NON-INVASIVE ULTRASONIC CLAMP-ON FLOW AND ENERGY METER SOLUTIONS FOR CLOSED-PIPE APPLICATION

- For “clean” liquid monitoring pipes 0.5” - 79”
- 100 million data point logger, no software required. Thumb drive download.
- Non-invasive sensing
- Portable and easy to use
- Ultrasonic, cross-correlation flow measurement
- Reynolds number correction
- Easy to install
- Simple to follow set-up menu
- Clamp-on flow and temperature sensors (BTU)
- Integral heat and energy meter functions (BTU)
- For hot and cold liquid applications
- Flow Range – 0.33 ft/sec to 65.62 ft/sec bi-directional
- Sensor cables, blocks and temp sensors (BTU): Sensors are IP54 rated for 275°F with IP68 option and High Temp option (392°F)
- Display – 64 x 240 pixels display
- Set-up via 16 key control panel
- Battery or mains operation
- Rechargeable NiMH battery
- Battery Life – 14 hours 2.5 hours charge time, depending on load
- Power – 110 – 240VAC +/-10% supply via PSU
- Accuracy ±0.5% to ±3% depending on pipe size for flow rate > 0.6 ft/sec
- **CE approved**

## PORTAFLOW SPECIFICATION

| | |
|---|---|
| PF333<br><br>PF333HM<br>(heat meter) | **Carry Case:** The PF333 is supplied in a hard wearing IP67 carry case.<br>**‘A’ Transducers:** 0.5” OD to 4.5” OD pipes<br>**‘B’ Transducers:** 2.0” OD to 78.7” OD pipes<br>**Transducer Operating Temp:** ‘A’&‘B’ -4°F to +275°F.<br>**Optional:** Hi-Temp sensors (392°F)<br>**Optional:** IP68 Transducers<br>**Outputs:** Isolated 0/4-20mA: RS 232/USBI; Pulse output - programmable pulse width 2ms-500ms or frequency.<br>**Data Logging:** 100,000,000 data points. 12 named sites. Download via USB to CSV file. |
| PF222 | **Carry Case:** Polypropylene case, with foam insert and double wall for extra strength.<br>**‘A’ Transducers:** 0.5” OD to 4.5” OD pipes.<br>OR<br>**‘B’ Transducers:** 2” OD to 39” OD pipes.<br>**Transducer Operating Temp:** ‘A’&‘B’ -4°F to +275°F.<br>**Optional:** IP68 Transducers<br>**Outputs:** Isolated 0/4-20mA: RS 232/USBI; Pulse output - programmable pulse width 2ms-500ms or frequency. |


**PF 333HM**

## U1000 Series

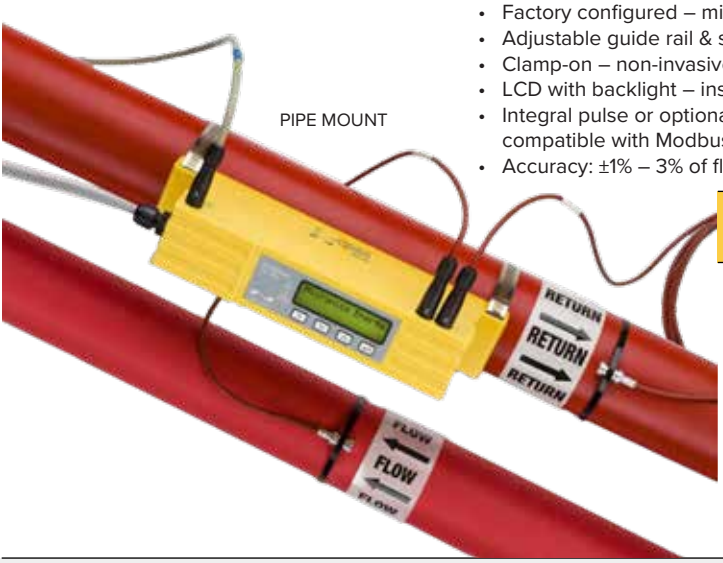
### PIPE-MOUNTED FIXED ULTRASONIC FLOW/HEAT METER

A cost effective alternative to traditional in-line meter installation, plus dry servicing, providing minimum downtime and maximum availability!

- Factory configured – minimal site configuration
- Adjustable guide rail & sensor assembly – simple installation
- Clamp-on – non-invasive & low install cost
- LCD with backlight – install & service information
- Integral pulse or optional 4-20mA, Modbus, BACnet outputs (aM&T & BEM's compatible with Modbus)
- Accuracy: ±1% – 3% of flow reading for >1 ft/s

WALL MOUNT

PIPE MOUNT




### U1000 SPECIFICATION

| | |
|---|---|
| U1000<br>U1000WM (wall mount)<br>U1000HM (heat meter) | **Flow Velocity Range:** 0.3 ft/s – 32 ft/s<br>**Pipe Range:** 0.9" – 4.5" OD or 4.9" – 7.1" OD<br>**Liquid Temp Range:** 20°F – 185°F<br>**Flow Rate Output:** Hi-Temp sensors<br>**Volume Output:** Pulse for volume flow and alarms. Frequency for flow rate. Pulse can be configured as a loss of signal or low flow alarms.<br>**External Power Supply:** 12V – 24V +/- 10% AC/DC at 7 watts per unit. Optional plug in 12V power supply.<br>**Electronic Enclosure:** IP54<br>**Input/Output Cable:** 16.4 ft 6-core cable for input |

## UF3300 Series

### FIXED ULTRASONIC LIQUID FLOW/ENERGY METER

- For "clean" liquid monitoring pipes 0.5" - 196"
- Non invasive sensing for permanent applications
- Ultrasonic, cross-correlation flow measurement
- Easy to install with simple set-up menu
- Clamp-on flow and temperature sensors (BTU)
- Reynolds number correction
- Hot and chilled liquids
- Integral Heat and Energy meter functions
- Bi-directional accurate measurement over wide fluid velocity range, 0.3ft/sec - 65ft/sec
- Accuracy: ±0.5% to ±2%, depending on pipe size, for flow rates >0.66 ft/s
- **CE approved**




### U3300 SPECIFICATION

| | |
|---|---|
| U3300 (wall mount)<br>U3300HM (heat meter) | **Enclosure:** Wall mountable, ABS housing with clear front panel and IP65 protection.<br>**Flow Velocity Range:** 0.33 ft/s to 65.6 ft/s bi-directional<br>**'A' Transducers:** 0.5" OD to 4.5" OD pipes, IP54 with optional IP68<br>**'B' Transducers:** 2.0" OD to 78.7" OD pipes, IP54 with optional IP68<br>**Transducer Operating Temp:** 'A'&'B' -4°F to +275°F.<br>**Optional:** High Temp Transducers: A' & 'B': -4°F to +392°F<br>**Optional:** IP68 Transducers<br>**Outputs:** 4-20mA flow proportional output, optically isolated 1500V, 620 ohms max load<br>**Data Logging:** 100,000,000 data points. Download via USB to CSV file. |

## UX5000 Series

### UX5000 CLAMP-ON FLOW METER FOR USE IN HAZARDOUS ENVIRONMENTS.

- Non-invasive, efficient, and easy installation, no process downtime
- ATEX/IECEx Approved for Class 1 Div 1 Areas, MET (NRTL) HazLoc Class I Div I GP B.C.D T4
- Dual channel optional
- Certified for use in hazardous areas (Zone 1 and Zone 2)
- Intrinsically Safe Measurement System including matched, wet calibrated transducers.
- Reliable measurement accuracy
- Separate Display (DCSIU) and Measurement Unit (RMU) allows flexibility in installation.
- Suitable for a wide range of pipe sizes and pipe material available as Kit B (2"-12" pipes)


**UX5000**

The UX5000 is designed for a wide range of industrial applications, particularly in harsh and heavy-duty environments. It provides non-invasive liquid flow measurement in pipes, making it especially well-suited for the chemical, water, and oil industries.

**Typical applications include:**

- Liquid Hydrocarbons in Oil Industry
- Flow Measurement in Chemical Industry
- Heavy Industry Process Liquid Measurement

# Flow Meters

A flow meter is a device that measures the rate at which liquid moves through a system, providing critical data to monitor, regulate, and optimize performance. Flow meters play a vital role in industries such as industrial manufacturing, water treatment, HVAC, and oil refining—where precise flow data is essential for improving efficiency, maintaining quality, and ensuring full control of key processes.

## Why Choose Micronics?

Micronics delivers high-performance, non-invasive flow metering systems designed to provide accurate and precise measurement across water, energy management, building services, and industrial processing. Our flow meters help monitor and optimize the movement of liquids in critical applications—from manufacturing and HVAC to water treatment and oil refining—empowering businesses to boost efficiency, ensure quality, and take control of essential operations.

Our ultrasonic clamp-on meters, flow sensors, and MID-approved energy and water meters are designed for fast installation, low maintenance, and precise performance. From building services to complex energy systems, Micronics delivers the accuracy, efficiency, and reliability you need to stay in control.


Not sure what you need?
Check out our
Clamp On Flow Meter Wizard

**www.ClampOnFlow.com**