The new alternative
to cutting pipes and mechanical meters
from Micronics, for
simple, low cost flow measurement from
outside the pipe!

The U1000 is an ultrasonic permanent/fixed clamp-on flow metering
solution for measuring flow rate — with a volume pulse output and
optional 4-20mA flow rate signal, which can be used as a stand
alone meter or as an integral part of an aM&T or BEM’s system.

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

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

Compact, rugged and reliable, the U1000 has been designed to
provide sustained performance in industrial environments.

- Metered liquid flow rate and volume
- Easy to install
- Clamp-on sensors
- Lower installed cost than in-line meters
INDUSTRIES:
- Building Services
- Energy Management
- Water Treatment
- Chemical
- Pharmaceutical
- Petrochemical
- Food

RECOMMENDED FOR:
- Hot water < 185°F
- Chilled water
- Potable water
- Demineralised water

APPLICATION/USE:
- Hot water metering and flow measurement
- Flow measurement for heat metering
- Chilled water metering and flow measurement
- Flow measurement for chilled water energy metering
- Potable water metering and flow measurement
- Process water metering and flow measurement
- Ultrapure water measurement

PIPE MATERIALS:
- Steel
- Plastic
- Copper

U1000 Specification
Accuracy: +/-1-3% of flow reading for >0.1 f/s
Flow Velocity Range: 0.33 to 32.8 f/s
Pipe Range: 0.98 in. OD - 4.53 in. OD
Water Temp Range: 32°F to 185°F
Flow Rate Output: Optional 4-20mA
Volume Output: Pulse or Frequency
Outputs preset to default condition based on Pipe Nominal Bore
External Power Supply: 12V-24V +/- 10% AC/DC at 7 watts
Electronics Enclosure: IP54
Input/Output Cable: 16.4 foot x 6 core for power in and data out
HOW DOES IT WORK?

The Ultraflo is a transit time ultrasonic flow meter designed to work with clamp-on transducers, to provide accurate measurement of liquid flowing within a closed pipe, without the need for any mechanical parts to be inserted through the pipe wall or to protrude into the flow system. It takes just a few minutes to install and there is no need to shut down flow or drain the system!

When ultrasound is transmitted between the transducers, the speed at which the sound travels through the liquid is accelerated slightly by the velocity of the liquid through the pipe. When ultrasound is transmitted in the opposite direction, the flow of the liquid causes the transmitted sound to decelerate. The subsequent time difference is directly proportional to the flow velocity in the pipe. Having measured the flow velocity and knowing the pipe cross-sectional area, the volumetric flow can be easily calculated.