

Micronics Product Catalogue

Transit Time Flow Meters



Portable Transit Time Meters

Dedicated Meters



Through Measurement Comes Control

August 06

# Portable Transit Time Meters



## Portaflow 300

- Compact, lightweight, rugged, waterproof, IP 66 electronics housing.
- User friendly, menu driven set up.
- Large graphics display - 64x240 pixels.
- Choice of English, German, French.
- Internal battery, mains or DC powered.
- Data logger, Totaliser.

**'A' Transducers in mounting rail:-** 13mm ID to 89mm ID pipes.  
**'B' Transducers in mounting rail:-** 90mm ID to 1000mm ID pipes.  
 Guide rail for diagonal operation using 'B' or 'C' Transducers for pipes larger than 300 mm with Hi-Velocity flows.

**Optional Transducers:-** 'C' and 'D' for pipes > 300mm up to 5000mm

**Transducer Operating Temp:-** 'A' 'B' 'C' -25°C to +125°C, 'D' -25°C to +80°C.  
 Optional Hi-Temp Transducers for operation above +125°C to 175°C.

**Outputs:-** Opto Isolated 0/4 -20mA; RS 232; 5v pulse @ 1 pulse/sec max.

**Power:-** 110 - 240V AC +/-10% supply via Battery charger.

12V DC input supply converter (optional).

**Battery Life:-** 24-38 hours from fully charged battery.

**Display:-** 64 x 240 pixels Graphic display.  
 Size 48 x 125mm viewable area. Backlight.

**Programming:-** Via 16 key control panel.

**Data Logging:-** 50000 data points. Up to 20 named recording blocks.  
 Data displayed locally in text or graph format. Real time or stored.

Can be downloaded via RS 232 port to Windows based PC.

## Portaflow SE

- User friendly, rechargeable battery, mains or DC powered.
- Compact, rugged, lightweight, IP 55 electronics housing.
- Hi-resolution backlit graphics display
- Imperial, Metric, US, volume or velocity units.
- Data logger.
- Totaliser.

**Pipe Operating Range:-** 50mm ID to 1000mm ID. Reflex or Diagonal Mode.

**Transducer Temperature working range:-** -25°C to +125°C.

**Option:-** Hi Temperature Transducers to 175°C max.

**Power:-** 110 - 240vAC +/-10% via charger.

**Option:-** 12v DC Input supply converter.

**Battery:-** Rechargeable cells.

8-10 hours operational life from full charge.

**Display:-** 64x128 pixel graphics display, Backlight.

**Data Logging:-** 50000 data points: 20 named blocks: Text/graph format.

Local or downloaded to Window based PC.

**Outputs:-** Opto isolated 0/4-20mA, RS 232.

**Programming:-** Via 16 key control panel.



## Portaflow 216

- Low cost.
- Lightweight, compact, IP 55.
- Simple to use, compact, rugged.
- Menu driven, simple functionality.
- Volume, velocity, total in metric and Imperial units.

**Pipe operating Range:-** 50mm to 400mm ID.

**Transducer Operational Temperature Range:-** -20°C to +125°C.

**Option:-** Hi temperature transducers to 175°C max.

**Power:-** 110 - 240v AC +/-10% via charger.

**Option:-** 12v DC Input supply converter.

**Battery Life:-** 8-10 hours from full charge.

**Display:-** 64x128 pixels graphics display. Backlit.

**Programming:-** via 16 key control panel.

**Outputs:-** Opto Isolated 0/4 -20mA;  
 4V pulse @ 1 pulse/ sec.



# Portable Transit Time Meters

## Portaflow 204 PLUS

- Simple to use, compact, rugged.
- IP 55.
- Menu driven, simple functionality.
- Volume, velocity, total in metric and Imperial units.
- Hi-resolution backlit graphics display
- Low cost.



**zPipe Range:-** 13mm to 100mm ID.  
**Transducer temperature Range:-** -20°C to +125°C.  
**Power:-** 110v -240v AC +/-10% via battery charger.  
**Option:-** 12v DC Input supply converter.  
**Battery Life:-** 8-10 hours from full charge.

**Display:-** 64x128 pixels graphics display. Backlit.  
**Units:-** Selectable, volume rate, velocity or total.  
**Output:-** Opto Isolated 0/4 -20mA; 4V pulse @ 1 pulse/ sec.  
**Programming:-** via 16 key control panel.

## Dedicated Meters

### U-100



- Application specific.
- Pre-calibrated and scaled.
- No mechanical adjustment required.

**Electronics:-** Cast aluminium housing 150x90x60mm, Waterproof, Dust proof to IP54.  
**Operating Temp Range:-** +5°C to +60°C.  
**Storage Temp Range:-** -5°C to + 65°C.  
**Power:-** 90-260VAC, 50/60Hz or 20-28VDC @ 5W.  
**Outputs:-** 0/4-20mA, Pulse (1per sec max) RS 232 Opto Isolated. Diagnostics and reconfiguration via RS232 port using installed GUI software.

**Pipe Range:-** 50mm to 200mm ID.  
**Application Temp Range:-** - 20°C to +80°C.  
**Flow Range:-** up to 24L/sec in 100mm pipe.  
**Minimum flow:-** 0.3m/sec.  
**Typical Accuracy:-** +/-1 to 3% of reading or 0.05m/sec whichever is the greatest.  
**Repeatability:-** +/- 1% with unchanged sensor position.  
**Linearity:-** +/-1% of calibrated range.

## Ultraflo 2000 Flow & Heat Meters

- Simple set-up menu.
- Current, pulse or set point outputs.
- High temp. Transducers-option.
- Energy meter version.

**Pipe Range:-** 25mm to 5000mm ID.  
**Electronics:-** ABS housing with clear polycarbonate front panel waterproof and dustproof to IP66.  
**Temperature Range:-** +5°C to + 60°C.  
**Keypad:-** 16 key panel for set up, Diagnostics. Access password protected  
**Display:** 2 x 16 LCD. Backlit.  
**Power Input:-** 110/240VAC +/-10% 50/60Hz @ 50watts 24VDC +/- 10%, 6 watts.  
**Outputs:-** Flow proportional 0/4 – 20mA Active opto isolated into 500ohms. Bi-directional; Pulse or set point relay. 5A-SPDT. Selectable rate and totaliser to 12

digits.  
**Transducers:-** A, B, C or D sensors factory selected based on flow rate.  
**Range:-** 0.5m/sec to 10m/sec.  
**Operating Temp.** -20°C to +125°C Optional hi-temp to +175°C  
**Accuracy:-** < +/- 3% of reading or +/- 0.05m/sec whichever is the greater  
**Repeatability:-** < +/- 1% with unchanged Transducer positions.



## The Company




Micronics Limited commenced trading in 1985 and was set up to design and Market "Clamp-On" ultrasonic liquid flow meters.

The founders of the company previously designed a number of 'Doppler' and 'Time of Flight' Ultrasonic meters, marketed in the UK through their own private company labels, the first of which was sold in 1980.

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Since 1985 Micronics Limited have sold more than 10,000 clamp-on meters in 50 countries, concentrating mainly on portable 'Time of Flight' meters that are marketed under the registered trade name of 

Since the introduction of the first **portable** meter the company now markets a range of 13 different instruments based on the use of non invasive ultrasonic sound transmission to detect liquid flow velocity within closed pipes or open channels.

Micronics now aim to offer flow solutions to our customers and can support the product with **flow analysis** software and expert staff that are able to conduct flow and pump efficiency survey work.

Micronics also hire all of their meters enabling us to help our customers by providing emergency cover for failed meters or unexpected events that need to be monitored closely.

*This brochure provides a snapshot of the Micronics range of Ultrasonic meters, but for more information why not visit: [www.micronicsltd.co.uk](http://www.micronicsltd.co.uk).*

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