PORTABLE ULTRASONIC FLOWMETER KIT
Portable, Non-Invasive and Data Logging Option

The SERIES PUB & PUF Portable Ultrasonic Flowmeter Sets utilize the transit-time difference for measuring flow rates in pipes non-invasively. Units offer flow rate local display with analog and pulsed outputs. The Series UFC offers the same features plus data logging capability.

FEATURES/BENEFITS
• Non-invasive pipe measurement
• Compact and lightweight
• Incorporate the latest electronics and signal processing technologies realizing high performance and easy operation
• Ideal for on-the-go flow monitoring, capable of 20 hours continuous operation with built-in, rechargeable battery
• Easy to read graphic display with convenient backlight for visual comfort
• Efficient layout of the function keys for easy to use programming
• PUB features rugged carrying case with molded foam inserts
• PUF boasts an IP67 rated case to hold and protect all equipment conveniently

APPLICATIONS
• Water treatment
• Industrial systems
• Irrigation applications
• Treated water flow
• River water
• Sea water
• Potable water
• Deionized water
• Glycol/water mix
• Hydraulic system
• Diesel oil
• Water use data logging

KIT INCLUDES
• Converter
• Set of transducers
• Transducer holders
• Set of transducer cables (6.56 ft (2 m))
• 4 to 20 mA communication cables
• 12 VDC power supply
• Ultrasonic coupling grease
• Set of chains
• Ruled guide rail
• Test block
• Carrying case

SPECIFICATIONS

Service: Homogeneous liquids that do not contain air bubbles capable of ultrasonic wave propagation.

Inputs: Lemo connector cable from sensors.

Range: 0.33 to 65.62 ft/s (0.1 to 20 m/s).

Display: 240 x 64 pixel graphic display, high contrast black on white with backlight; Languages: English, French, German, Swedish, Italian, Spanish, Portuguese, Russian, Norwegian, and Dutch; 5.2˝ W x 1.5˝ H.

Accuracy: ±0.5 to 2% of flow reading for flow rate > 0.66 ft/s (0.2 m/s) and pipe ID > 2.95 in (75 mm); ±3% of flow reading for flow rate > 0.66 ft/s (0.2 m/s) and pipe ID in range 0.512 to 2.95˝ (13 to 75 mm); ±6% of flow reading for flow rate < 0.66 ft/s (0.2 m/s).

Power Requirements: 9 to 24 VDC, (1) 5-Cell NiMH battery, internal, factory replaceable (continuous operation time: 20 hours with back-light and output off) (recharging time: 6.5 hours, power adapter used).

Power Consumption: 10.5 W.


Temperature Limits: -4 to 275°F (-20 to 135°C).

Outputs: Analog: 1 opto-isolated output: 4 to 20 mA, 0 to 16 mA or 0 to 20 mA (selectable); Error current: 0 to 26 mA (selectable); Load resistance: 620 Ω max;

Pulse: 1 opto-isolated MOSFET relay, 150 mA max, 500 pps max, 200 Hz max.

Serial Communications: USB; RS-232 (PUF only).

Enclosure Rating: Converter: IP54; Transducers: IP51.

Materials: Flame retardant injection molded ABS plastic.

Turbidity: < 3% by volume of particulate content.

Agency Approvals: CE.

ADDITIONAL SPECIFICATIONS

Applicable Pipe Material: Carbon steel, SS, copper, UPVC/PVDF, concrete, galvanized steel, mild steel, glass, brass.

Pipe Wall Thickness: 0.04 to 3˝ (1 to 75 mm).

Pipe Lining Thickness: < 1˝ (< 25 mm).

*Selectable option for special material with known propagation rate of lining material.

OPTION

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<th>Description</th>
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<td>NISTCAL-FU</td>
<td>NIST traceable calibration certificate</td>
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