



FLOW SERIES

ONE-STOP SOLUTION

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ULTRASONIC FLOW METER

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UF2000-H Handheld Ultrasonic Flow Meter

Product Introduction

UF2000H handheld ultrasonic flow meter achieves non-contact measurement of liquid flow. Simply install the sensors on the outer pipe wall to complete flow measurement. Features include compact size, portability, and accurate measurement.

Widely used in water supply, heating, water conservancy, metallurgy, chemical engineering, machinery, energy, and other industries. Applicable for production monitoring, flow calibration, temporary inspection, flow patrol, water-balance commissioning, heat-network balance commissioning, and energy-saving monitoring. It is an indispensable instrument for real-time flow detection.



Product Features

- ▷ High Accuracy — Accuracy up to $\pm 1\%$;
- ▷ Wide Measurement Range — from DN15 to DN6000 mm by using different sensors;
- ▷ Rechargeable Power Supply — Built-in large-capacity Ni-MH rechargeable battery; supports over 12 hours of continuous operation. Use the AC adapter to achieve uninterrupted measurement;
- ▷ Non-Contact Measurement — Clamp ultrasonic sensors onto the outer pipe wall to complete flow measurement;
- ▷ Multi-Language Menu — Chinese, English, Italian and other languages available on request;
- ▷ Large LCD Display — Simultaneously displays cumulative flow, instantaneous flow, flow velocity, and working status;
- ▷ Built-in Data Logger — 32 Kbit internal storage; can store up to 2,000 rows of measurement data.

Technical Specification

| Category | Parameter | Value / Description |
|---------------------|--|---|
| Main Unit | Principle | Ultrasonic transit-time principle, 4-byte IEEE 754 floating-point calculation |
| | Accuracy | Flow: better than $\pm 1\%$ |
| | Display | 4×8 Chinese or 4×16 Western character dot-matrix backlit LCD; supports Chinese, English, Italian |
| | Signal Output | 1-channel OCT pulse output (pulse width 6-1000 ms, default 200 ms) |
| | Data Interface | Isolated RS-232 serial interface; supports firmware upgrade via PC |
| Pipe Conditions | Pipe Material | Steel, stainless steel, cast iron, copper, PVC, aluminium, FRP, and other dense materials; linings allowed |
| | Inner Diameter | 15-6000 mm |
| | Straight-pipe Section | Best: upstream $\geq 10D$, downstream $\geq 5D$, $\geq 30D$ from pump outlet (D = pipe diameter) |
| Measurement Medium | Type | Water, seawater, industrial wastewater, acid/alkaline liquids, alcohol, beer, various oils — any single uniform liquid that conducts ultrasound |
| | Temperature | -30-160°C |
| | Turbidity | $\leq 10,000$ ppm, small bubble content |
| | Flow Velocity | 0- ± 10 m/s |
| Working Environment | Temperature | Transmitter: -20-60°C; Flow sensor: -30-160°C |
| | Humidity | Transmitter: 85% RH; Sensor protection class IP67 |
| Power Supply | 3 built-in 1.2 V / 2000 mAh Ni-MH rechargeable batteries; continuous operation >12 h per charge; AC 90-260 V adapter for uninterrupted measurement | |
| Power Consumption | 1.5 W | |
| Enclosure Material | Flame-retardant ABS | |

Optional Flow Sensors

| Type | Spec | Photo | Model No. | Pipe Diameter | Temp. Range | Dimensions |
|--------------------|--------------------|---|-----------|---------------|-------------|--------------|
| Standard Clamp-on | Standard Small |  | TS-2 | DN15-DN100 | -30-90°C | 45×25×32mm |
| | Standard Medium |  | TM-1 | DN50-DN700 | -30-90°C | 64×39×44mm |
| | Standard Large |  | TL-1 | DN300-DN6000 | -30-90°C | 97×54×53mm |
| High-Temp Clamp-on | High-Temp Small |  | TS-2-HT | DN15--DN100 | -30-160°C | 45×25×32mm |
| | High-Temp Medium |  | TM-1-HT | DN50-DN700 | -30-160°C | 64×39×44mm |
| | High-Temp Large |  | TL-1-HT | DN300-DN6000 | -30-160°C | 97×54×53mm |
| Standard Rail | Standard Small |  | HS | DN15-DN100 | -30-90°C | 318×59×85mm |
| | Standard Medium |  | HM | DN50-DN300 | -30-90°C | 568×59×85mm |
| | Standard Extended |  | EB-1 | DN300-DN700 | -30-90°C | 188×59×49mm |
| High-Temp Rail | High-Temp Small |  | HS-HT | DN15-DN100 | -30-160°C | 318×59×110mm |
| | High-Temp Medium |  | HM-HT | DN50-DN300 | -30-160°C | 568×59×110mm |
| | High-Temp Extended |  | EB-1-TH | DN300-DN700 | -30-160°C | 188×59×49mm |

Order Information

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|--|---|---------------------------------|-----------------------------|---------------------------------|
| UF2000 SELECTION Type | H | 100 | 1 | 5 |
| Transducer type | H=Handheld type | | | |
| DN Size | 15 = DN15mm 100 = DN100mm 6000= DN6000mm | | | |
| Optional flow sensor (Multiple selections allowed) | 1=TS-2 5=TM-1-HT 9=EB-1 | 2=TM-1 6=TL-1-HT 10=HS-HT | 3=TL-1 7=HS 11= HM-HT | 4=TS-2-HT 8=HM 12=EB-1-TH |
| Cable Length | 5= 5m×2(typical) 10=10m×2 | | | |