# TDS-100H
## Handheld Ultrasonic Flow Meter


## | Features |

- High accuracy, better than 1%
- Wide measuring range
- Pipe size DN15...6000 mm
- Convenience for routing inspection

## | Introduction |

TDS-100H handheld ultrasonic flow meter is designed to work with clamp-on sensors to measure the liquid flow within a closed pipe without any insertion mechanical parts. Mainly be used for routing inspection or pipe monitoring, very convenience for use. It is controlled by a micro-processor system which contains a wide range of data that enables it to be used with pipes with an outside diameter ranging from 15 mm up to 6000 mm (Depending on model) and constructed of almost any material.

## | Applications |

Piping systems / Energy-saving monitoring / Water-saving management / Industrial use / Semiconductor manufacturing / Food manufacturing industry / Cooling tower / Power plant

# | Specification |

## Input

| | |
|---|---|
| Velocity range | 0 ... ±10 m/s |
| Repeatability | ±0.2% |
| Accuracy | ±1% |
| Units | m3 , ft3 , lites , US gallon , barrel ETC. |
| Power supply | Three internal 1.2 V, 2000 mAH rechargeable Ni-MH battery can work 12 hours fully charged. Can achieve continuous measurement with AC 100 ... 240 V power adapter. |
| Power consumption | 1.5 W |
| Dimension | 200H x 90W x 33D mm. |
| Installation | Upstream 10D, downstream 5D, 30D away from the pump outlet (D for diameter) |

## Environmental

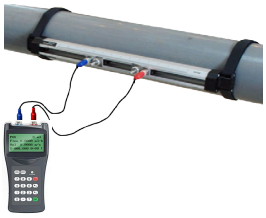
| | |
|---|---|
| Liquid type | Water, sea water, waste water, alcohol, beer, various kinds of oil etc which can conduct ultrasound single uniform liquid |
| Temperature | Main unit : -20 ... 60°C<br>Sensor : -30 ... 160°C |
| Liquid temperature | -30 ... 160°C |
| IP rating | IP65 |

## Material

| | |
|---|---|
| Pipe material | Steel, stainless steel, cast iron, copper, PVC, aluminum, FRP, etc. |
| Pipe size | DN15 ... DN6000 mm |
| Cable | 5 m (Standard set, 2 cable) |

Standard type clip box

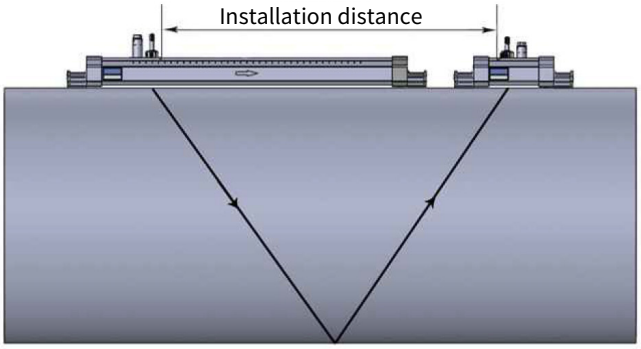
# | Choose Installation Optional |

| Schematic diagram | Installation |
|---|---|
|  | **Clamp on transducer**<br>Easy to install and no need to cut off the flow, no pressure loss.<br>Different transducer from DN15 ... DN6000.<br>Different transducer for temperautre -30 ... 160°C. |
|  | **Bracket mounting**<br>Reduces installation time, improve installation accuracy.<br>Easy installation no need cut the flow, no pressure loss.<br>Different transducer from DN15 ... DN700.<br>Different transducer for temperautre -30 ... 160°C. |

# | How to Use the Extension Bracket |

## V-method Installation

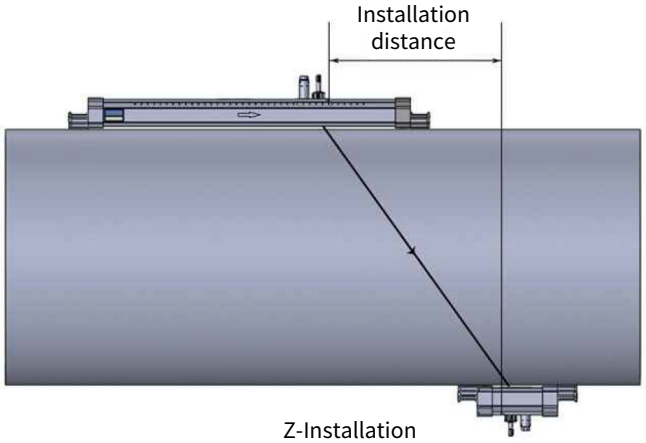
V-method installation is the moswidely used mode for daily measurement with pipe inner diameters ranging from 15 millimeter to 200 millimeter. It is also called reflective mode or method.




V-Installation

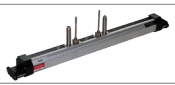
## Z-method Installation

Z-method is commonly used when the pipe diameter is between 300 millimeters and 500 millimeters.




Z-Installation

# | Optional Transducer |

| Type | Picture | Size | Model | Measuring range | Temp. | Dimension (mm) |
|---|---|---|---|---|---|---|
| Standard clamp on type |  | Small | S1 | DN15 ... DN100 | -30 ...160°C | 45x25x32 |
| |  | Medium | M2 | DN50 ... DN700 | -30 ...160°C | 64x39x44 |
| |  | Large | L2 | DN300 ... DN6000 | -30 ...160°C | 97x54x53 |
| Standard bracket type |  | Small | BS | DN15 ... DN100 | -30 ... 90°C | 318x59x85 |
| |  | Medium | BM | DN50 ... DN300 | -30 ... 90°C | 568x59x85 |
| |  | Large(without sensor) | BL | DN300 ... DN700 | -30 ... 90°C | 188x59x49 |