

# 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

## | Choose Installation Optional | | Specification |

### Input

Velocity range	0 ... $\pm 10$ m/s
Repeatability	$\pm 0.2\%$ <small>1 channel OCT pulse output, pulse wt ... 1000 ms (Default is 200 ms)</small>
Accuracy	$\pm 1\%$
Units	m3 , ft3 , lites , US gallon , barrel ETC. <small>Isolation of TDS communication interface</small>
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. <small>1 BIT</small>
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 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



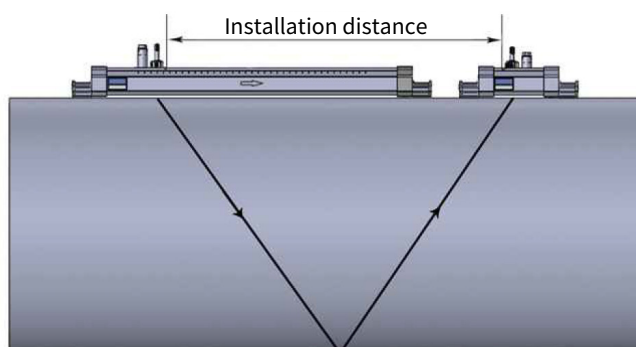
## | Choose Installation Optional |

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

## | How to Use the Extension Bracket |

### V-method Installation

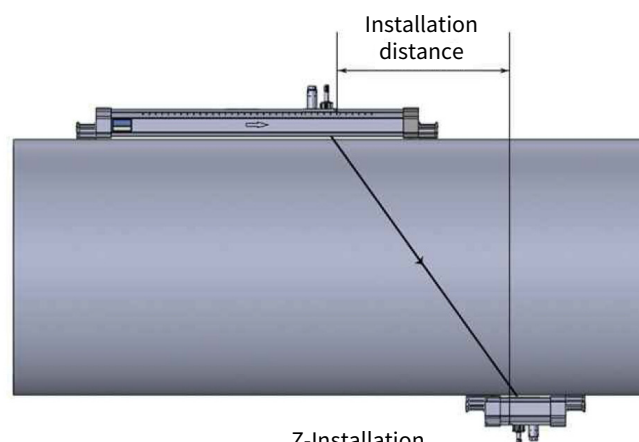
V-method installation is the most widely used mode for daily measurement with pipe inner diameters ranging from 15 millimeter to 200 millimeter. It is also called reflective mode or method.



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	HS	DN15 ... DN100	-30 ... 90°C	318x59x85
		Medium	HM	DN50 ... DN300	-30 ... 90°C	568x59x85
		Large(without sensor)	HL	DN300 ... DN700	-30 ... 90°C	188x59x49