

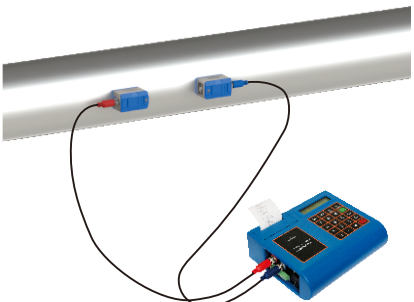
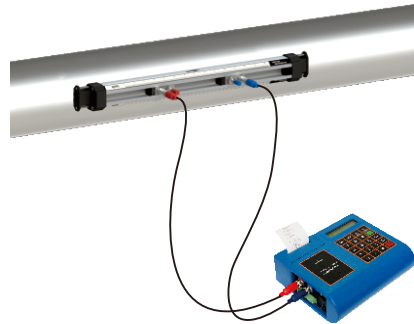
Portable Ultrasonic Flow Meter

Portable ultrasonic flow meter realizes the non-contact measurement. It is ideal for flow surveys and closed-pipe application where non-invasive measurement of liquids is required. Built-in SD card and printer can timely or regularly print pre-set measuring results.

Temperature and heat can also be measured by connecting clamp on temperature transducer. Widely be used in water supply, heat supply, chemical industry, machinery and energy resources.



Measuring Diagram

Clamp on Transducer	Mounting Bracket Transducer
	
<ul style="list-style-type: none"> • No need to cutoff water, no pressure loss • Measuring range: DN15~DN6000 • Fluid temperature: -30℃~160℃ 	<ul style="list-style-type: none"> • No need to cutoff water, no pressure loss • Measuring range: DN15~DN700 • Fluid temperature: -30℃~160℃ • Improve installation accuracy, shorten installation time

Optional transducers

Types	Picture	Spec.	Model	Measurement Range	Temp.	Dimension
Clamp on		Small Size	TS-2	DN15~DN100	-30~90℃	45×25×32mm
		Medium Size	TM-1	DN50~DN700	-30~90℃	64×39×44mm
		Large Size	TL-1	DN300~DN6000	-30~90℃	97×54×53mm
High temperature clamp on		Small Size	TS-2-HT	DN15~DN100	-30~160℃	45×25×32mm
		Medium Size	TM-1-HT	DN50~DN700	-30~160℃	64×39×44mm
		Large Size	TL-1-HT	DN300~DN6000	-30~160℃	97×54×53mm
Mounting Bracket Clamp on		Small Size	HS	DN15~DN100	-30~90℃	318×59×85mm
		Medium Size	HM	DN50~DN300	-30~90℃	568×59×85mm
		Extended	EB-1	DN300~DN700	-30~90℃	188×59×49mm
High Temperature Mounting Bracket Clamp on		Small Size	HS-HT	DN15~DN100	-30~160℃	318×59×110mm
		Medium Size	HM-HT	DN50~DN300	-30~160℃	568×59×110mm
		Extended	EB-1-HT	DN300~DN700	-30~160℃	188×59×49mm

Parts Description



Interface

Output signal: 4-20mA(optional)
Pulse signal
Relay signal

Input signal: 3 way 4-20mA

Communication interface: RS485

Thermal printer (24 column characters)

Available to timely and regularly print over 20 pre-set measuring results



Display

Support languages of Chinese, English and Italian



SD card

Convenience for long-term storage of data.
Available to do the data processing like tabulation, statistics, data analysis, print reports and make flow curve by using the matching data analysis software.



Carrying case

High-strength carrying case, easy to take, dustproof, waterproof and impact resistance.



Size and Fittings



Mounting bracket transducer

Size of carrying case: length × width × height
615 × 420 × 130 mm



Clamp on transducer

Size of carrying case: length × width × height
470 × 350 × 130 mm

Data sheet

Items	Performance & Parameter	
Flow meter	Principle	Transit time ultrasonic flowmeter
	Accuracy	± 1%
	Display	2×20 character LCD with backlight, support the language of Chinese, English and Italian
	Signal Output	1 way 4-20mA output, electric resistance 0~1K, accuracy 0.1%
		1 way OCT pulse output(Pulse width 6~1000ms, the default value is 200ms)
		1 way relay output
	Signal Input	3 way 4-20mA input,, acquire signals such as temperature, press and liquid level.
		Achieve to heat measurement by connecting the temperature transducer PT100.
Pipe Installation Condition	Data Interface	RS485 serial interface, upgrade the flowmeter software by computer, support MODBUS
	Data Record	Thermal printer, external SD card(2G of capacity)
	Pipe Material	Steel, Stainless steel, Cast iron, Copper, Cement pipe, PVC, Aluminum, Glass steel product, liner is allowed.
Measuring Medium	Pipe Diameter	15~6000mm
	Straight Pipe	Transducer installation should be satisfied: upstream 10D, downstream 5D, 30D from the pump.
	Type of Liquid	Single liquid can transmit sound wave, such as water, sewage, oil, chemicals, plant effluent, beverage, ultra-pure liquids, etc.
	Temperature	-30~160℃
	Turbidity	Less than 10000ppm and little bubble
Working Environmen	Flowrate	0~± 10m/s
	Temperature	Convertor: -20~60; Transducer: -30~160
	Humidity	Convertor : 85%RH; TransducerI protection level:IP67
Power Supply	8 built-in Ni-MH batteries 1.2V(for over 20 hours of operation). Could operate 8 hours by connecting 4-20mA signal output. 90V - 260V AC adapter	
Power Consumption	1. 5W	

Model selection code

MTDS-100P – optional transducers
(you may choose more than one options) – cable length – output

1	TS-2	standard small size	5	5m×2 (standard)	N	no output
2	TM-1	standard medium size	10	10m×2	1	4-20mA output
3	TL-1	standard large size				
4	TS-2-HT	high temperature small size				
5	TM-1-HT	high temperature medium size				
6	TL-1-HT	high temperature large size				
7	HS	smallsize mounting bracket				
8	HM	medium size mounting bracket				
9	EB-1	extended mounting bracket				
10	HS-HT	high temperature small size mounting bracket				
11	HM-HT	high temperature medium size mounting bracket				
12	EB-1-HT	high temperature extended mounting bracket				