



Handheld Ultrasonic Flow Meter



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Overview

The ultrasonic flow meter, can be used for nearly any liquid from water, sewer water, petrol chemicals, metallurgy, electric power plant coolant flow, irrigation, city water, energy monitoring, the meter can indicate flow velocity, flow rate, total flow for nearly any fluid.



Application

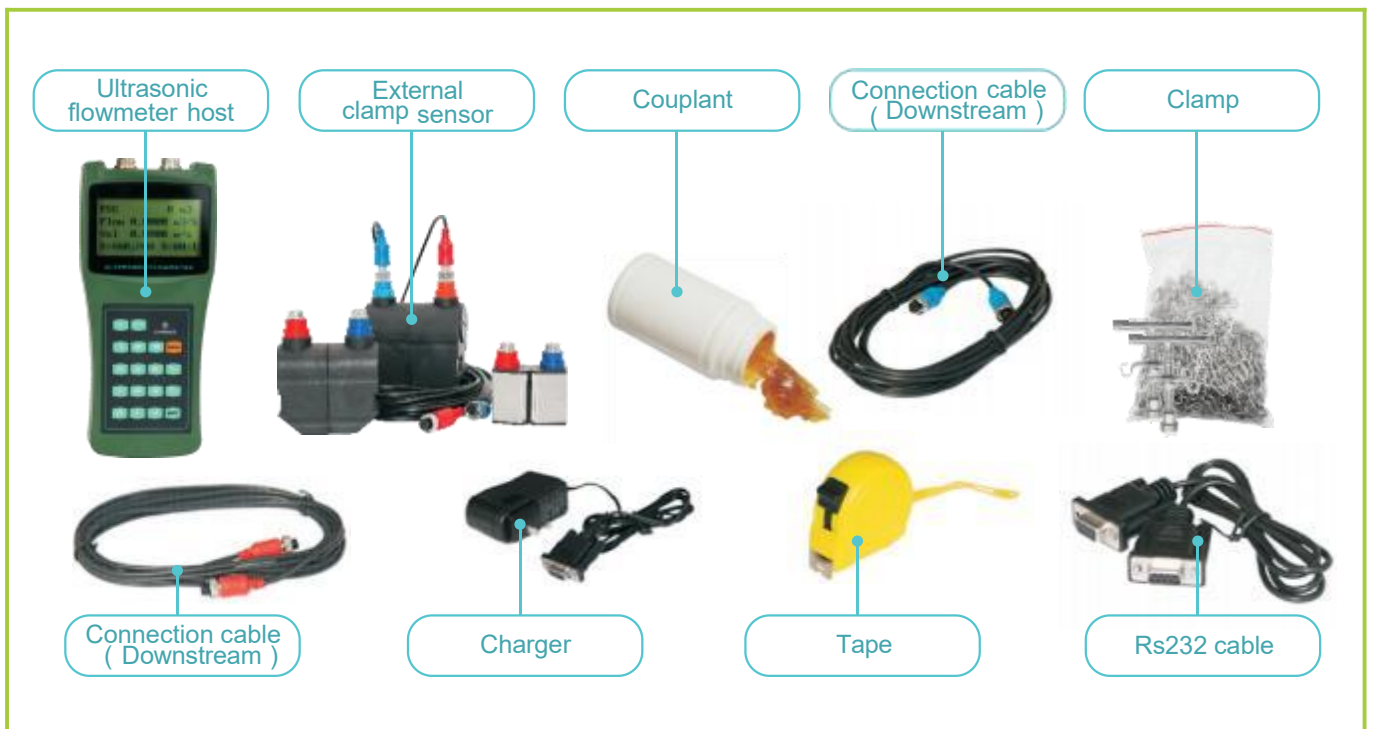


Features

- Accuracy better than 1%
- Measurement range from DN15~DN6000mm
- Built-in high-capacity Ni-MH rechargeable batteries will last more than 10 d hours(Fully charged).
- Non invasion measurement, Can achieve measurement with clamp on sensors
- Data Storage,32K BIT built-in data storage,can store two thousand rows of data
- LCD display can display the instant flow,total flow,flow velocity and working condition



Handheld Ultrasonic Flow Meter Components





The main components feature



①

Transducer interface

②

Communication interface



③

Lcd Display

(Sight size:85*19mm LCD display
2*20 english English letter)

High Strength Protective Case

④

⑤

Delicate Button Cover

Exquisite diaphragm button response quickly, good keyboard tactile, long working life.



Transducers



Clamp on transducer



Clamp on transducer with bracket



Specifications

Type		Performance Parameter
Transmitter	Principle	Ultrasonic transit-time principle, Four-byte IEEE754 floating-point arithmetic
	Accuracy	Flow: Better than $\pm 1\%$
	Display	LCD display with Chinese, English, Italian language
	Output	One OCT pulse output (pulses width 6-1000ms, Default 200ms)
	Data Interface	Isolation of 232 communication interface, can upgrade flowmeter through PC
Pipeline Conditions	Pipe Material	Steel, Stainless steel, Cast iron, copper, PVC, aluminium, FRP etc. (liner allowed)
	Diameter	15~6000mm
	Installation	Upstream 10D, downstream 5D, 30D away from the pump outlet (D for diameter)
Medium	Fluid	Water, sea water, acid liquid, beer, alcohol, oil and any other liquid that can spread sonic
	Temperature	Temperature: $-30\sim 160\text{ }^{\circ}\text{C}$
	Turbidity	10000ppm and with little bubbles
	Velocity	$0\sim \pm 10\text{m/s}$
Operating Environment	Temperature	Transmitter: $-20\sim 60\text{ }^{\circ}\text{C}$; Transducer: $-30\sim 160\text{ }^{\circ}\text{C}$
	Humidity	Transmitter: 85%RH; transmitter protection grade: IP67
Power	Three internal 1.2V, 2000mAh rechargeable Ni-MH battery. Can work 12 hours fully charged. Can achieve continuous measurement with AC100-240V power adapter	
Consumption	1.5W	
Case Material	Flame retardant ABS	
Weight	Transmitter: 514g	



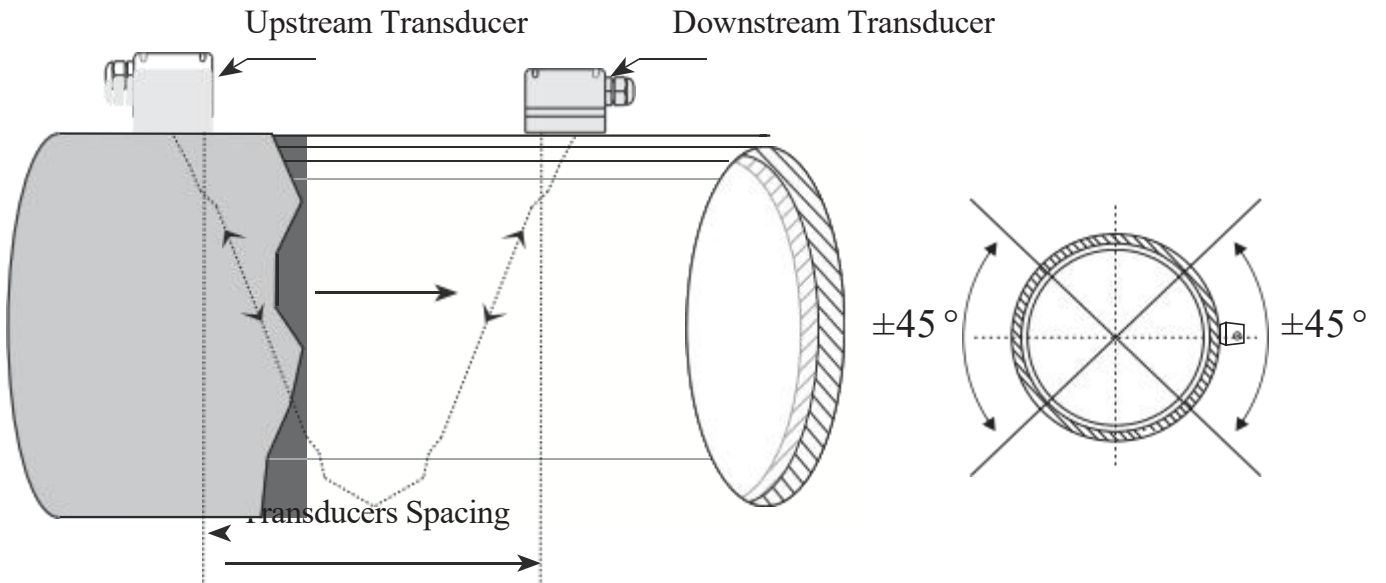
Optional Transducers

Type	Picture	Size	Model	Measuring range	Temperature	Dimension
Standard Clamp on Type		Small	S2	DN15-DN100	-30°C~90°C	45×25×32mm
		Medium	M2	DN50-DN700	-30°C~90°C	64×39×44mm
		Large	L2	DN300-DN6000	-30°C~90°C	97×54×53mm
High Temperature Clamp on Type		Small	S2H	DN15-DN100	-30°C~160°C	45×25×32mm
		Medium	M2H	DN50-DN700	-30°C~160°C	64×39×44mm
		Large	L2H	DN300-DN6000	-30°C~160°C	97×54×53mm
Standard Clamp on Type		Small	HS	DN15-DN100	-30°C~90°C	318×59×53mm
		Medium	HM	DN50-DN300	-30°C~90°C	568×59×85mm
		Extension	EB-1	DN300-DN700	-30°C~90°C	188×59×49mm
High Temperature Clamp on Type		Small	HS-HT	DN15-DN100	-30°C~160°C	318×59×110mm
		Medium	HM-HT	DN50-DN300	-30°C~160°C	568×59×110mm
		Extension	EB-1-HT	DN300-DN700	-30°C~160°C	188×59×49mm

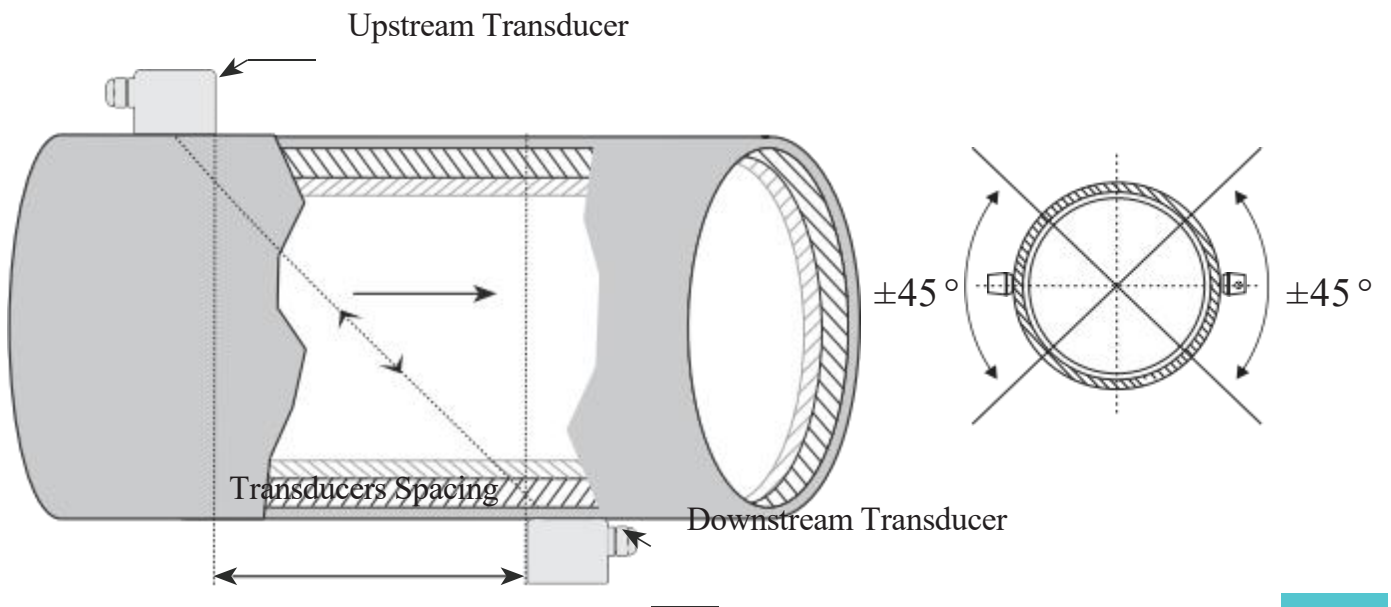


Optional Transducers

V method is usually used on pipes from DN15 mm to DN200 mm



Z-method is usually used on pipes from DN200mm to DN600mm.





Model Selection

ZXDS	XX	XX	XX	Description
Handheld 100H Include: Ultrasonic Handheld * 1 set Power Adaptor * 1 set RS232 communication cable * 1 set Ruler * 1 set Clamp * 1 set Carrying Case * 1 set	100H			Handheld Flowmeter
Small clamp sensor, ½" ~ 4" (DN15 ~ 100 mm),(-30 ~ 90°C)	S2			Transducers
Middle clamp sensor, 2" ~ 28" (DN50 ~ 700 mm),(-30 ~ 90°C)	M2			
Large clamp sensor, 12" ~ 240" (300 ~ 6000 mm),(-30 ~ 90°C)	L2			
High Temperature small clamp sensor, ½" ~ 4" (DN15 ~ 100 mm), (-30 ~ 160°C)	S2H			
High Temperature middle clamp sensor, 2" ~ 28" (DN50 ~ 700 mm), (-30 ~ 160°C)	M2H			
High Temperature large clamp sensor,12" ~ 240" (DN300 ~ 6000 mm), (-30 ~ 160°C)	L2H			
Bracket Small clamp Sensor ½" ~ 4" (DN15 ~ 100 mm) ,(-30 ~ 90°C)	HS			
Bracket Middle clamp sensor, 2" ~ 12" (DN50 ~ 300 mm) ,(-30 ~ 90°C)	HM			
Bracket Middle clamp sensor, 2" ~ 12" (DN50 ~ 700 mm) ,(-30 ~ 90°C)	EB-1			
Bracket Small clamp Sensor ½" ~ 4" (DN15 ~ 100 mm) ,(-30 ~ 160°C)	HS-HT			
Bracket Middle clamp sensor, 2" ~ 12" (DN50 ~ 300 mm) ,(-30 ~ 160°C)	HM-HT			
Bracket Middle clamp sensor extend to 28" (DN300 ~ 700 mm) ,(-30 ~ 160°C)	EB-1-HT			
5m length, 2 Cables (Standard length)		SC		
Optional cable length		OC		Length
IP65 Protection for transducers			ST	Protection
IP68 Protection for transducers			IP68	