



Feature

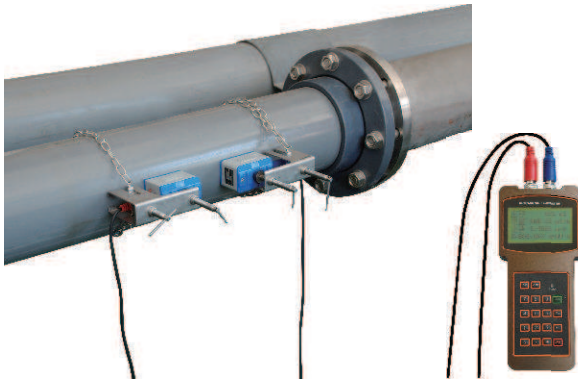
- **High Accuracy**
Accuracy better than 1%.
- **Wide Measurement Range**
Measurement range from DN15~DN6000mm
- **Rechargeable Power Supply**
Built-in high-capacity NiMH rechargeable batteries can work 20 hours(Fully charged).
- **Non invasion measurement**
Can achieve measurement with clamp on sensors
- **Data Storage**
32K BIT built-in data storage,can store two thousand rows of data
- **LCD display**
LCD dispaly can display the instant flow,totoal flow,flow velocity and working condition



Product Introduction

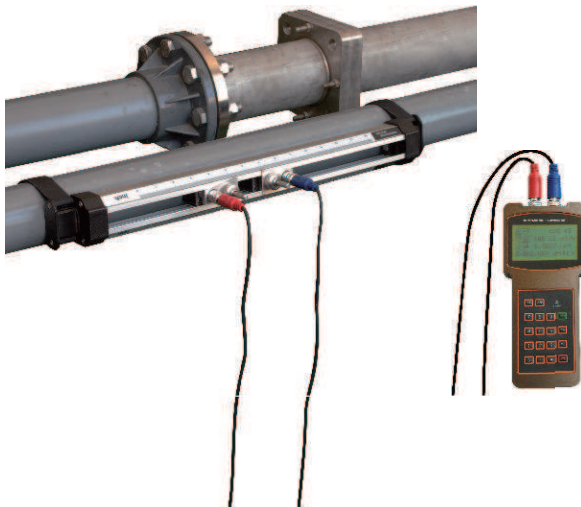
The handheld ultrasonic flow meter is designed to work with clamp-on transducers to enable the flow of a liquid within a closed pipe to be measured accurately without needing to insert any mechanical parts through the pipe wall or protrude into the flow system.

Using ultrasonic transit time techniques, the PHILEMON-H 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 15mm up to 6000mm (depending on model) and constructed of almost any material. The instrument will also operate over a wide range of fluid temperatures.



Clamp on transducer

- Easy to install and no need to cut off the flow, no pressure loss
- Different transducer from DN15~DN6000
- Different transducer for temperature -30~160°C



- Reduces installation time, improve installation accuracy
Easy installation, no need cut the flow, no pressure loss
- Easy to install and no need to cut off the flow, no pressure loss
- Different transducer from DN15~DN700
- Different transducer for temperature -30~160°C

Application

Water supply



Supply heating



Building Energy Conservation



Metallurgy



Petroleum & Chemical

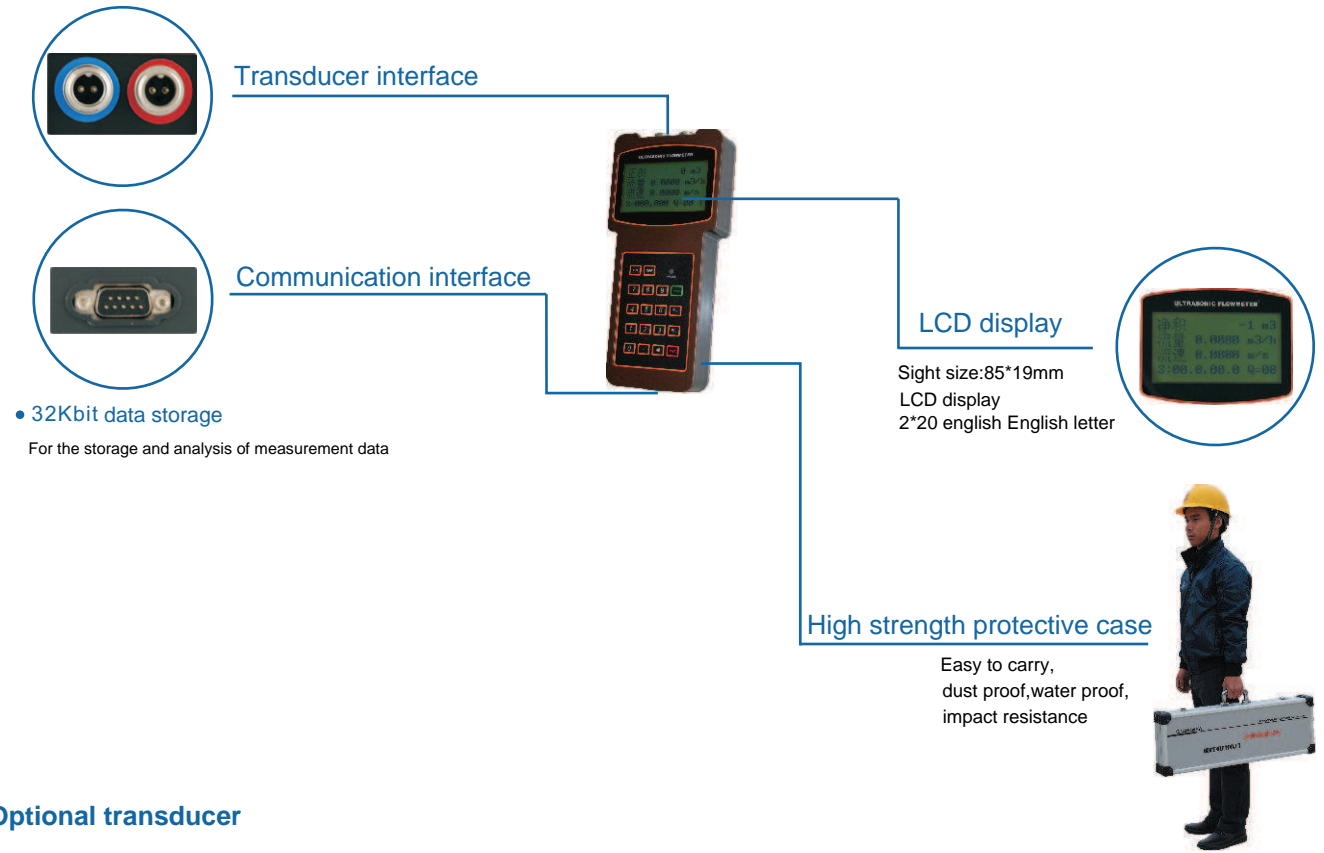


Power plant





The main components feature



• Optional transducer

Type	Picture	Size	Model	Measuring range	Temperature	Dimension
Standard Clamp on Type		Small	TS-2	DN15~DN100	-30~90℃	45×25×32mm
		Medium	TM-1	DN50~DN700	-30~90℃	64×39×44mm
		Large	TL-1	DN300~DN6000	-30~90℃	97×54×53mm
High Temperature Clamp on Type		Small	TS-2-HT	DN15~DN100	-30~160℃	45×25×32mm
		Medium	TM-1-HT	DN50~DN700	-30~160℃	64×39×44mm
		Large	TL-1-HT	DN300~DN6000	-30~160℃	97×54×53mm
Standard Bracket Type		Small	HS	DN15~DN100	-30~90℃	318×59×85mm
		Medium	HM	DN100~DN300	-30~90℃	568×59×85mm
		Large	EB-1	DN300~DN700	-30~90℃	188×59×49mm
High Temperature Bracket Type		Small	HS-HT	DN15~DN100	-30~160℃	318×59×110mm
		Medium	HM-HT	DN100~DN300	-30~160℃	568×59×110mm
		Large	EB-1-HT	DN300~DN700	-30~160℃	188×59×49mm



Basic technical parameters

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 AC90~260V power adapter	
Consumption	1.5W	
Case Material	Flame retardant ABS	
Weight	Transmitter: 390g	

Model Selection

– Transmitter(multiple) – Cable length
 5 5m*2(standard)
 10 10m*2

Example:

Explanation: Handheld ultrasonic flowmeter with HS, HM, TL-1 transmitter, 5*2 cable

