Multi-Channel Ultrasonic Flowmeter

Multi-channel ultrasonic water meter is suitable for continuously measuring flow and heat of clean and uniform liquids without large concentration suspended particles or gases industrial environment. When the ultrasonic beam propagates in the liquid, the flow of the liquid will cause a slight change in the propagation time, and the change in the propagation time is proportional to the flow velocity of the liquid. Therefore, the flow velocity of the fluid can be detected by the received ultrasonic wave, so as to be converted into flow rate

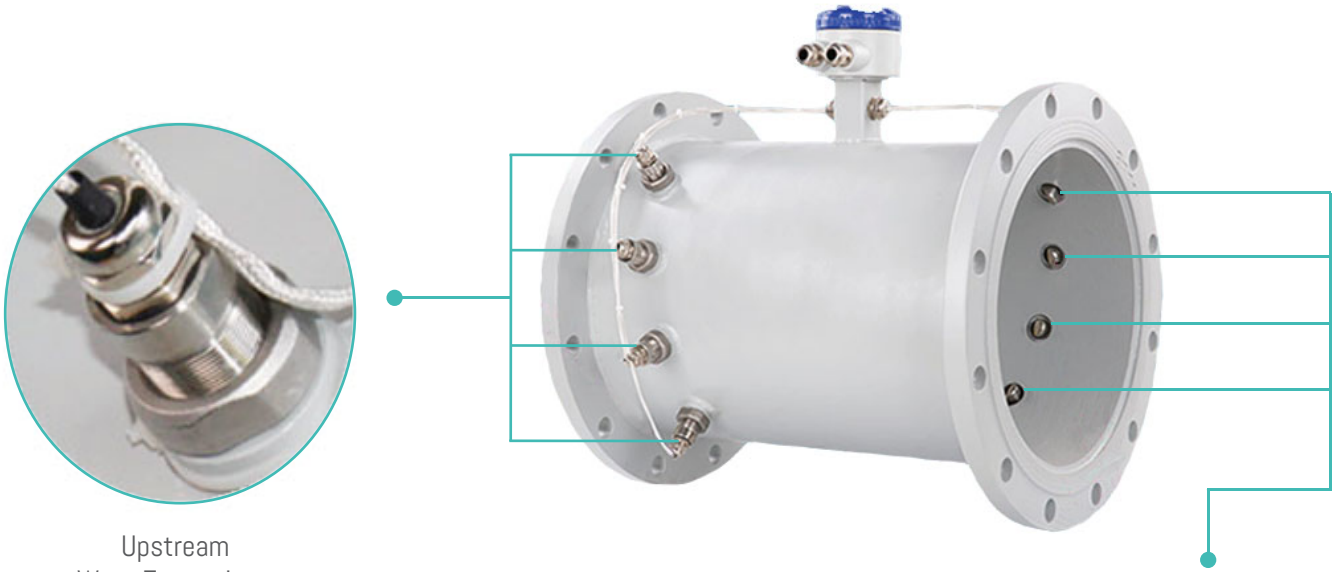
Ultrasonic water meters have been widely applied to the field of industrial flow metering of large-diameter heat meters, large-diameter water meters. Multi-channel ultrasonic flow meter mainly for Cooling /Heat water, River water, Running water, etc.

Feature

- Heat measurement.
- Measuring conductivity liquid and Non-conductivity liquid.
- Can measure zero-flow.
- 2 way analogy input could transmit flow,pressure,temperature,pressure etc.
- Instantaneous flow, Total flow, Heat, Positive flow, Negative flow.
- Multi-channel ultrasonic water meter is less sensitive to upstream obstacles such as elbows, pumps or valves, and the reliability of the measurement results is high, even if one channel stops working due to some reasons, the flow meter The measurement can still be continued. The requirements for a typical straight inlet pipe section are at least 10D upstream and at least 5D downstream. On the premise of meeting the above installation require ments, the measurement accuracy of the multi-channel ultrasonic flow meter can reach ±0.5%. In contrast, the repeatability requirement of the electromagnetic flow meter under this accuracy is 1/3 of the accuracy, and the repeatability of the ultrasonic flow meter under this accuracy is 1/5 of the accuracy

Multiple Channels Measurement

Number of channels : 2, 4, 8, 10 up on selection



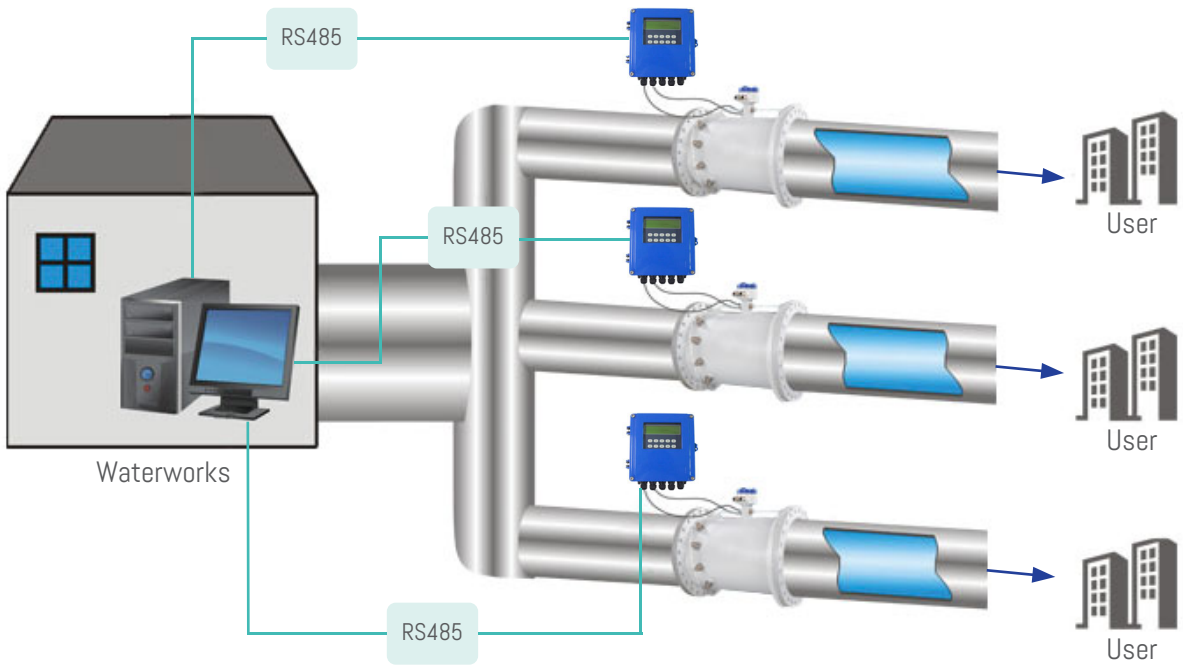
Upstream
Wave Transmitter

Large measuring surface provides mroe ultrasonic wave replection. Accuracy : ±1.0%

Downstream
Wave Receiver

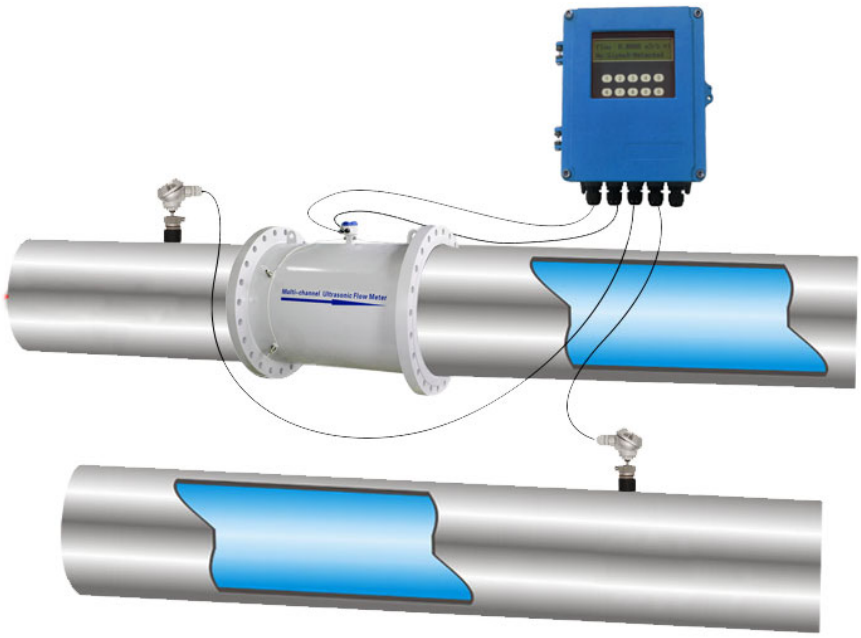
Trade Settlement

Widely use in waterworks and heat exchange station.



Measuring Heat

Multi-Channel Ultrasonic Flowmeter could connect temperature sensor to become one calorimeter

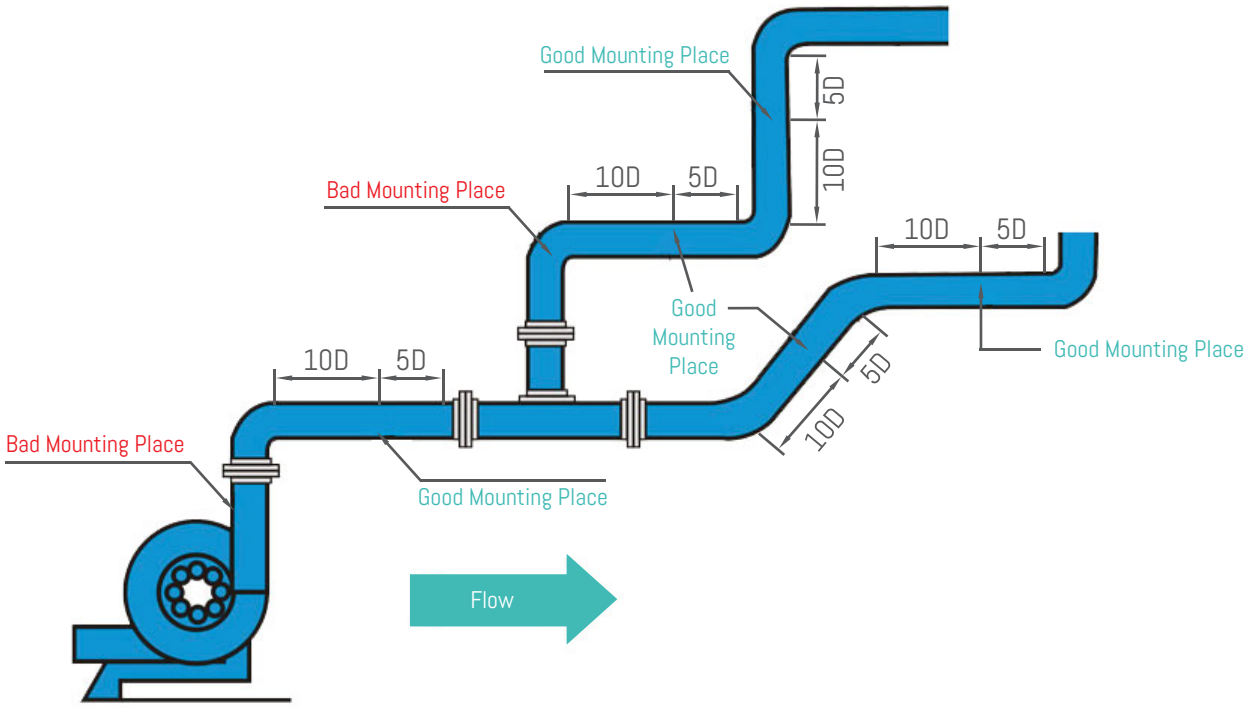


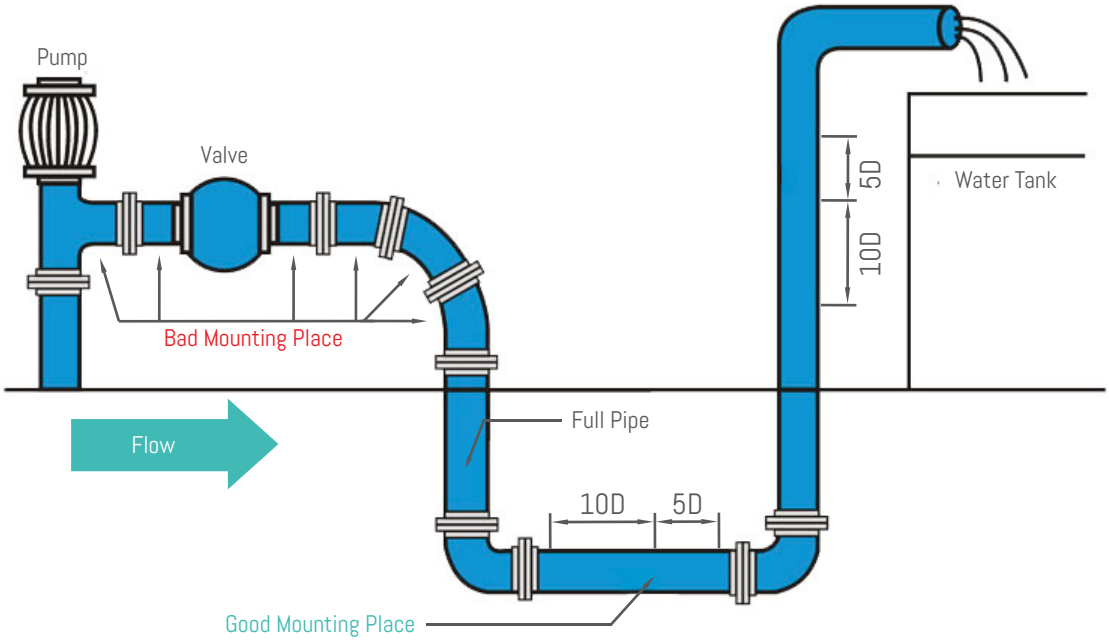
- No Moving Parts
- No Wear
- No Pressure Loss
- Maintenance Free

Pipe Dia : 50 - 2000 mm
Body Material : Carbon Steel, SUS304 and SUS316

Product Group

Installation Method





Technical Performance Parameters	
Accuracy	DN50 - DN2000 mm
Repeatability	± 1.0 %
Principle	± 0.1to 10 m/s
Velocity	2-way two-wire PT 100
Pipe Size	4-20 mA, Pulse, OCT, RS485
Measuring Cycle	50 ms. (20 times/s, collect 64 groups data)
Power Supply	DC 24V & AC 220V
Body Material	Carbon Steel (Standard), SUS304(Optional), SUS316(Optional)
Cable Length	Max 100 m
Working Temperature	Host : -10 °Cto 70 °C, Sensor : -30 °C to 150 °C
Flow Direction	Could separately measure forward and reverse flow. and could measure net now
Other Function	Memory total now date, month, year Fault self-diagnosis function
Turbidity	≤ 10000 ppm, low bubble content
Humidity	Host 85%RH
Straight Pipe	Upstream ≥ 10D, Downstream ≥ 5D, Pump outlet ≥ 30D
Media	Water, Seawater, Acid solution, Cooking oil, Gasoline, Coal oil, Oiesel, Alcohol, Beer and otner unifonn liquid could transmitting ultrasonic waves

Model Select

MCU30	XXX	X	X	X	X	X
Caliber	50 - 2000mm					
Body Material	Carbon Steel	C				
	SS304	S0				
	SS316	S1				
Nominal Pressure	0.6 MPa		P1			
	1.0 MPa		P2			
	1.6 MPa		P3			
	2.5 MPa		P4			
	Other Special		P5			
Output	4-20 mA, Pulse, OCT, RS485			0		
Structure	Integral				I	
	Remote				R	
Connection	Flange					1