



▶ Feature

- ✓ **High Accuracy**
Accuracy better than 1%.
- ✓ **Measure Range**
Select different model sensors, can achieve DN15-DN6000mm pipe flow measurement
- ✓ **High Reliability**
Adopt low voltage, multi-pulse radiating circuit. Accuracy, Lifetime and Reliability are better.
- ✓ **High Anti-interference**
Adopt double balanced signal differential transmission, receiving circuit, effective resist the drive, tower, Strong power lines and other source of interference.
- ✓ **Powerful Memory Function**
Automatic memory the cumulative flow of 512 days before, 128 months before, 10 years before.
Automatic memory the power-on and off of 64 times before and the flow.
Automatic memory the meter working condition of 32 days before.
- ✓ **Support Temperature Sensor**
Connect with Temperature sensor, it can measure heat flow.
- ✓ **Support SD card memory**
Select SD card memory, it can realize mass storage by ultrasonic flowmeter

▶ PRODUCT INTRODUCTION

The AFT Ultrasonic Flowmeter widely used to measure different kinds of liquid.

Transmitter and transducer install seperately. Transmitter can install at indoor, Instrument cabinet, Dashboard.

Transducer install on the pipes. Transmitter and Transducer connect by special cable.

It can realize to measure flow. Connect with temperature sensor, it can measure heat flow.

Widely used in Running water, Heating, Water conservation, Metallurgy, Chemical industry, Machinery, Energy etc.

Used for production monitoring, water balance testing, thermal equilibrium network commissioning, energy monitoring.

It is most important flow measure instrument during manufacturing process.

▶ MEASUREMENT CONPOSITION

Flow Measurement	Heat/Cold	Energy	Feature
 <p>Clamp On Type</p>	 <p>Water supply pipe Water return pipe</p>	<ul style="list-style-type: none"> *Installation without drying up, no pressure loss *Easy installation and maintenance *Mating clamp temperature sensor that can measure the temperature of the outside of tube to achieve heat measure 	
 <p>Insertion Type</p>	 <p>Water supply pipe Water return pipe</p>	<ul style="list-style-type: none"> *Installation without drying up, no pressure loss *Stable and reliable during long-term operation *Mating clamp temperature sensor that can measure the temperature of the outside of tube to achieve heat measure 	
 <p>Pipe Type</p>	 <p>Water supply pipe Water return pipe</p>	<ul style="list-style-type: none"> *Installation require drying off the pipe *High accuracy, Stable and reliable during long-term operation *Mating clamp temperature sensor that can measure the temperature of the outside of tube to achieve heat measure 	

▶ TRANSMITTER

Due to different installation circumstance, choose different transmitter



*Wall-Mounted Type AFT
 *Used to mount on the wall
 *Dimension:170*180*56mm
 *Power supply:
 DC8-36V or AC85-264V

*Panel Mounted Type AFT
 *Used for meter cabinets installation
 *Dimension:152*76mm
 *Power supply:
 DC8-36V or AC85-264V

*Explosion Proof Type AFT
 *Used for hazardous area
 *Dimension:298*298*110mm
 *Power supply: DC8-36V or AC85-264V
 *Ex-proof Class:DIIBT4

▶ TRANSDUCER

Due to different liquid, pipeline condition installation circumstance, choose different transducer

Type	Picture	Specification	Model	Pipe Size	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
Insertion Type		Standard	TC-1	DN80~DN6000	-30~160℃	190×80×55mm
		longer type	TC-2	DN80~DN6000	-30~160℃	335×80×55mm
Pipeline Type		π	G3	DN15~DN25	-30~160℃	SS304 Thread Connection
		Standard	G2	DN32/DN40	-30~160℃	CS Thread Connection
		Standard	G1	DN50~DN6000	-30~160℃	CS Flange Connection

➤ Temperature Sensor

Picture	Specification	Model	Measurement Range		Installation Requirement	Accuracy
	Three Wire PT100 Clamp Temperature Sensor	CT-1	>DN50	-40~160℃	no need cut flow	100℃ ±0.8℃ Temperature difference <0.1℃ after match accurately
	Three Wire PT100 Insertion Temperature Sensor	TCT-1	>DN50	-40~160℃	need cut flow	
	Three Wire PT100 pressure installation insertion temperature sensor	PCT-1	>DN50	-40~160℃	no need cut flow	
	Small size three wire PT100 Insertion Type temperature sensor	SCT-1	<DN50	-40~160℃	need cut flow	

➤ SD Memory Card

SD card can realize the mass storage for ultrasonic flowmeter
Measuring data can deal with use our company software"flow data analysis, statistical"



SD card memorize & cassette

TECHNICAL PARAMETERS

Type	Performance,specification	
Transmitter	Principle	Ultrasonic transit-time principle,Four-byte IEEE754 floating-point arithmetic
	Accuracy	Better than $\pm 1\%$
	Display	LCD display with Chinese,English Display
	Output	One 4-20mA Current output,Impedance0-1K,Accuracy 0.1%
		One OCT Pulse output(Width 6-1000ms,Default200ms)
		One Relays output
	Input	Three 4-20mA Current input,accuracy 0.1%,can collect temperature, pressure,level signals etc.
Can connect with three-wire PT100 Platinum resistance to measure heat flow.		
Data Interface	Isolated RS485 interface, can upgrade flowmeter through PC,support modbus	
Cable	Normal below 50m;Select RS485 Communication,Transmission distance can over thousand meters.	
Pipe Condition	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	-30~160 °C
	Turbidity	10000ppm and with little bubbles
	Velocity	0 ~ \pm 10m/s
Operating Environment	Temperature	Transmitter:-20~60 °C;Transducer:-30~160 °C
	Humidity	Transmitter:85%RH;transmitter protection grade:IP68;Water Depth<2m
Power Supply	DC8-36V or AC85-264V	
Consumption	1.5W	