TUF-2000S Fixed Separated Ultrasonic Flowmeter



| Features |

- High Reliability
 - Adopt low voltage, multi-pulse technology to improve accuracy, useful life and reliability.
- Wide measuring range
 - Several types transducer for selection, pipe size from Dn15mm to Dn6000mm
- High Reliability
 - Adopt low voltage, multi-pulse technology to improve accuracy, useful life and reliability.
- Strong Anti-interference
 - Dual-balance signal differential receiver/driver circuit to avoid interference of converter, TV tower, high voltage line etc.
- Powerful Recording Function
 - Automatically record the following data:
 - 1. The totalizer data of the last 512 days/128 months/10 years
 - 2. The time and corresponding flow rate of the last 64 times of power on and off events
 - 3. The working status of the last 32 days
- Support Heat Measurement
 - Connect the temperature transducer, can finish the heat/energy measurement
- Support SD card Memory
 - Optional SD card

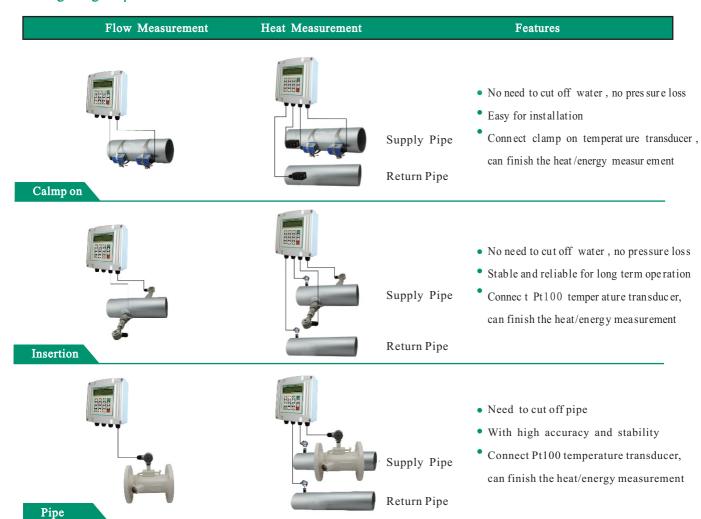
TUF-2000S

Fixed Separated Ultrasonic Flowmeter

| Liquid Type |

This flowmeter can be virtually applied to a wide range of measurement. A variety of liquid applications can be accommodated: ultra-pure liquids, potable water, chemicals, raw sewage, reclaimed water, cooling water, river water, plant effluent. etc

| Measuring Diagram |



Optional Convertor

According to different installation condition, pls choose relative convertor



- Wall mounted TUF-2000SW
- Wall mounting installation
- Dimension : $170 \times 180 \times 56$ mm
- Power supply: DC8~36V orAC85~264V



- Panel mounted TUF-2000SS
- Instrument cabinet installation
- Dimension : $170 \times 180 \times 56 mm$
- Hole-opening dimension $152 \times 76 \text{mm}$
- Power supply: DC8~36V or AC85~264V



- Explosion-proof TUF-2000SD
- Explosion-proof installation
- Dimension: 298×298×110mm
- Power supply: DC8~36V or AC85~264V
- Grade: DII BT4

Fixed Separated Ultrasonic Flowmeter

Optional Transducers

Types	Picture	Spec.	Model	Measurement Range	Temperature	Dimension	
Clamp on		Small Size	TS-2	DN15 [~] DN100	-30 [~] 90°C	45×25×32mm	
		Medium Size	TM-1	DN50 [~] DN700	-30 [~] 90°C	64×39×44mm	
		Large Size	TL-1	DN300 [~] DN6000	-30 [~] 90°C	97×54×53mm	
High temp Clamp on		Small Size	TS-2-HT	DN15 [~] DN100	-30 [~] 160°C	45×25×32mm	
		Medium Size	TM-1-HT	DN50 [~] DN700	-30 [~] 160°C	64×39×44mm	
		Large Size	TL-1-HT	DN300 [~] DN6000	-30 [~] 160°C	97×54×53mm	
Insertion		Standard	TC-1	DN80~DN6000	-30 [~] 160°C	190×80×55mm	
		Lengthen	TC-2	DN80~DN6000	-30 [~] 160°C	335×80×55mm	
Pipe	22	π type	G3	DN15 [~] DN25	-30~160℃	Pls refer to detailed pipe dimensions	
		Standard	G2	DN32/DN40	-30 [~] 160°C		
		Standard	G1	DN50~DN6000	-30 [~] 160°C		

| Optional Temperature Transducers |

Picture	Specification	Model	Meas. Range	Temperature	Cut of water	Accuracy
	Clamp on temperature Transducer Pt100	CT-1	≥DN50	-40 [~] 160°C	No	
	Insertion temperature Transducer Pt100	TCT-1	≥DN50	-40 [~] 160°C	Yes	100℃ ±0.8℃
	Insertion Pt100 Installation with pressure	PCT-1	≥DN50	-40 [~] 160°C	No	
	Insertion Pt100 Small size pipe diameter	SCT-1	<dn50< td=""><td>-40[~]160°C</td><td>Yes</td><td></td></dn50<>	-40 [~] 160°C	Yes	

Optional SD card memory

The SD card memory can be expanded to 2GB, which can achieve the ultrasonic flowmeter measurement data mass storage, can solve the problems for wall-mounted flowmeter measurement data stored, reading, and processing inconvenience, can completely replace manual meter reading, no paper records instrument.

In addition, the SD memory card measurements data, can be used by our company's "Flow data analysis, statistical software" for processing, including the tabulation, statistical, data analysis, printing reports, production flow curve and other functions.

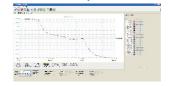




• Software Import Data



Instantaneous Flow Curves • Generated by Software



SD card memory of wall mounted

Cumulative Flow Bar Chart

Generated by Software

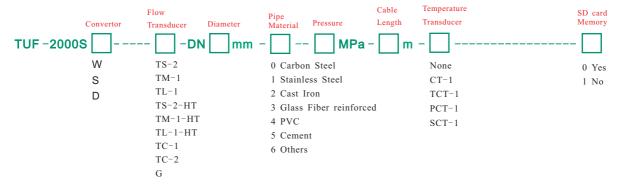


Fixed Separated Ultrasonic Flowmeter

Datasheet

Items	Performance & Parameter					
Convertor	Principle	Transit-time ultrasonic flowmeter				
	Accuracy	生1%				
	Display	2×20 character LCD with backlight, support the language of Chinese, English and Italy				
	Signal Output	1 way 4~20mA output, electric resistance 0~1K, accuracy0. 1%				
		1 way OCT pulse output (Pulse width 6~1000ms, default is 200ms)				
		1 way Relay output				
	Signal Input	3 way 4~20mA input, accuracy 0. 1%, acquisition signal such as temperature, press and liquid level				
		Connect the temperature transducer Pt100, can finish the heat/energy measurement				
	Data Interface	Insulate Rs485 serial interface, upgrade the flowmeter software by computer, support the MODBUS				
Special Cable	Twisted-pair cable, generally, the length under 50 meters; Select the RS485, transmission distance can over 1000m					
Pipe Installation Condition	Pipe Material	Steel, Stainless steel, Cast iron, Copper, Cement pipe, PVC, Aluminum, Glass steel product, liner is allowed				
	Pipe Diameter	15~6000mm				
	Straight Pipe	Transducer installation should be satisfied: upstream10D, downstream 5D, 30D from the pump				
Measuring Medium	Type of Liquid	Single liquid can transmit sound wave, such as Water (hot water, chilled water, city water, sea water, waste water, etc.); Sewage with small particle content; Oil (crude oil, lubricating oil, diesel oil, fuel oil, etc.); Chemicals (alcohol, etc.); Plant effluent; Beverage; Ultra-pure liquids, etc.				
	Temperature	-30~160℃				
	Turbidity	No more than 10000ppm and less bubble				
	Flowrate	0~±7m/s				
Working Environment	Temperature	Convertor: -20 ⁶⁰ °C; Flow Transducer: -30 ¹⁶⁰ °C				
	Humidity	dity Convertor: 85%RH; Flow Transducer: can measure under water, water depth≤2m (tansducer sealed glue)				
Power Supply	DC8~36V or AC85~264V (optional)					
Power Consumption	1. 5W					
Dimension	205*154*70cm(convertor)					

Ordering Code



 $Example: \ TUF-2000SW+TM-1+DN300+0+1 \ . \ 6MPa+10m+PCT-1+0$

 $PS: \ Standard \ confirguration = TUF-2000 SW (convertor) + TM-1 + 5M \ cable \ + Steel \ belt (DN200) + Couplant (1\ pc) + C$