

The fixed separated model is inline measurement for long-term.

There are 3 types converters including wall mounted, panel mounted and proof-explosion.

Convertors can be installed at indoor or instrument cabinet Transducers should be installed on the measuring pipe; Converter and transducer be connected by cable.




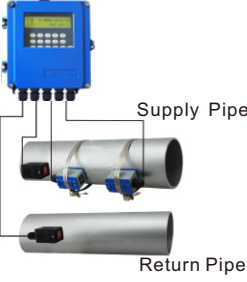

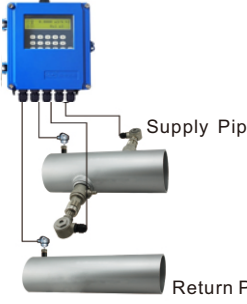

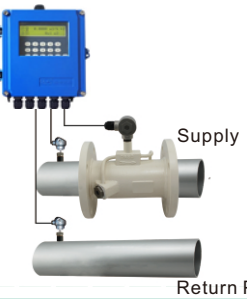
### | Features |

- **High Accuracy**  
1%
- **Wide measuring range**  
Several types transducer for selection, pipe size from DN25mm 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 (Option)**  
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

## | 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 |

| Flow Measurement   | Heat Measurement   | Features   |
|--|--|--|
|  <p><b>Calmp on</b></p>   |  <p>Supply Pipe<br/>Return Pipe</p>   | <ul style="list-style-type: none"> <li>• No need to cut off water , no pressure loss</li> <li>• Easy for installation</li> <li>• Connect clamp on temperature transducer, can finish the heat/energy measurement</li> </ul>                    |
|  <p><b>Insertion</b></p> |  <p>Supply Pipe<br/>Return Pipe</p>  | <ul style="list-style-type: none"> <li>• No need to cut off water , no pressure loss</li> <li>• Stable and reliable for long term operation</li> <li>• Connect Pt100 temperature transducer, can finish the heat/energy measurement</li> </ul> |
|  <p><b>Pipe</b></p>     |  <p>Supply Pipe<br/>Return Pipe</p> | <ul style="list-style-type: none"> <li>• Need to cut off pipe</li> <li>• With high accuracy and stability</li> <li>• Connect Pt100 temperature transducer, can finish the heat/energy measurement</li> </ul>                                   |

## | Optional Converter |

According to different installation condition, pls choose relative converter



- Panel mounted FM-300SS
- Instrument cabinet installation
- Dimension : 170×180×56mm
- Hole-opening dimension 152×76mm
- Power supply: DC8~36V or AC85~264V














- Explosion-proof FM-300SD
- Explosion-proof installation
- Dimension : 298×298×110mm
- Power supply: DC8~36V or AC85~264V
- Gade : DII BT4





## | Datasheet |

| Items  |   | Performance & Parameter   |
|--|---|---|
| <b>Converter</b>   | Principle   | Transit-time ultrasonic flowmeter   |
|  | Accuracy  | ± 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, accuracy 0.1%  |
|  |   | 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                   |   |
| <b>Special Cable</b>   | Twisted-pair cable, generally, the length under 50 meters; Select the RS485, transmission distance can over 1000m |   |
| <b>Pipe Installation Condition</b>   | Pipe Material   | Steel, Stainless steel, Cast iron, Copper, Cement pipe, PVC, Aluminum, Glass steel product, liner is allowed  |
|  | Pipe Diameter   | 25~6000mm   |
|  | Straight Pipe   | Transducer installation should be satisfied: upstream 10D, downstream 5D, 30D from the pump   |
| <b>Measuring Medium</b>  | 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 |
|  | Temperature   | -30~160℃  |
|  | Turbidity   | No more than 10000ppm and less bubble   |
|  | Flowrate  | 0~±7m/s   |
| <b>Working Environment</b>   | Temperature   | Converter: -20~60℃; Flow Transducer: -30~160℃   |
|  | Humidity  | Converter: 85%RH; Flow Transducer: can measure under water, water depth ≤ 2m (transducer sealed glue)   |
| <b>Power Supply</b>  | DC 8~36V or AC 85~264V (optional)   |   |
| <b>Power Consumption</b>   | 1.5W  |   |
| <b>Dimension</b>   | 170*180*56cm (converter)  |   |

## | Optional Transducers |

| Types              | Picture   | Spec.       | Model | Measurement Range | Temperature | Dimension                             |
|--------------------|---|-------------|-------|-------------------|-------------|---------------------------------------|
| Clamp on           |    | Small Size  | S1    | DN25~DN100        | -30~90°C    | 45×25×32mm                            |
|                    |    | Medium Size | M2    | DN50~DN700        | -30~90°C    | 64×39×44mm                            |
|                    |    | Large Size  | L2    | DN300~DN6000      | -30~90°C    | 97×54×53mm                            |
| High temp clamp on |    | Small Size  | S1-HT | DN25~DN100        | -30~160°C   | 45×25×32mm                            |
|                    |    | Medium Size | M2-HT | DN50~DN700        | -30~160°C   | 64×39×44mm                            |
|                    |    | Large Size  | L2-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               |    | π type      | G3    | DN15~DN25         | -30~160°C   | 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           | 100°C ± 0.8°C |
|  | Insertion temperature Transducer Pt100     | TCT-1 | ≥DN50       | -40~160°C   | Yes          |               |
|  | Insertion Pt100 Installation with pressure | PCT-1 | ≥DN50       | -40~160°C   | No           |               |
|  | Insertion Pt100 Small size pipe diameter   | SCT-1 | <DN50       | -40~160°C   | Yes          |               |