

# Insertion Dual-Channel Ultrasonic Flowmeter TF1100-DI



01

## Features:

- Hot-tapped installation, no pipe line flow interrupted.
- No moving parts, no pressure drop, no maintenance.
- The accuracy is  $\pm 0.5\%$  for dual channels insertion ultrasonic flowmeter.
- A wide range of flow measurement, high flow rate can reach 15m/s.
- High-temperature transducer is suitable to liquids of  $-35^{\circ}\text{C} \sim 150^{\circ}\text{C}$ .
- Wide bi-directional flow range of 0.01 to 15m/s, and wide range of pipe sizes from DN65-6000.
- Data logger function.
- The heat measurement function by configuring with paired temperature sensors.
- With the ability of dynamic zero.

## Specifications:

### Transmitter:

Measurement principle	Ultrasonic transit-time difference correlation principle
Flow velocity range	0.01 to 15 m/s, bi-directional
Resolution	0.1mm/s
Repeatability	0.15% of reading
Accuracy	± 0.5%R
Response time	0.5s
Sensitivity	0.001m/s
Damping of displayed value	0-99s(selectable by user)
Liquid Types Supported	Both clean and somewhat dirty liquids with turbidity <10000 ppm
Power Supply	AC: 85-265V DC: 12-24V
Enclosure type	Wall-mounted
Degree of protection	IP66 according to EN60529
Operating temperature	-10°C to + 60°C
Housing material	Fiberglass
Display	3.5" color LCD display, 16 keys
Units	User Configured (English and Metric)
Rate	Rate and Velocity Display
Totalized	gallons, ft <sup>3</sup> , barrels, lbs, liters, m <sup>3</sup> ,kg
Thermal energy	unit GJ, KWh can be optional
Communication	4-20mA, OCT, Relay, RS485(Modbus), Datalogger, GPRS, NB-IoT
Size	244*196*114mm
Weight	2.4kg

### Transducer:

Transducers Type	Insertion
Degree of protection	IP65. IP67 or IP68 according to EN60529
Suited Liquid Temperature	-35~150°C
Pipe diameter range	S for 65mm-6000mm
Transducer Size	φ 58*199mm
Material of transducer	SUS304 + Peek
Cable Length	Std: 10m

## Configuration Code:

### TF1100-DI Dual Channels Insertion Type Ultrasonic Flowmeter

#### Power supply

A 85-265VAC

D 24VDC

S Solar supply

#### Output Selection 1

N N/A

1 4-20mA (accuracy 0.1%)

2 OCT

3 Relay Output (Totalizer or Alarm)

4 RS232 Output

5 RS485 Output (ModBus-RTU Protocol)

6 Data storage function

7 GPRS

#### Output Selection 2

Same as above

#### Output Selection 3

#### Transducer Type

S DN65-6000 -35~150°C

2S DN65-6000 -35~150°C, two pairs of sensors

#### Temperature Input Sensor

N None

T Clamp-on PT1000(DN20-1000) (0~200°C)

#### Pipeline Diameter

DNX e.g.DN20—20mm, DN5000—5000mm

#### Cable length

10m 10m (standard 10m)

Xm Common cable Max 300m (standard 10m)

XmH High temperature. cable Max 300m

TF1100-DI - A - 1 - 2 - 3 / LTDI - 2S - N - DN100 - 10m (example configuration)

#### Description:

Power supply: 85-265VAC; output: 4-20mA, OCT, Relay output;

transducer type: 2S for DN65-6000 -35~150°C; without PT1000 temperature sensors; DN100 application; 10m transducer cables.