

## Main Specifications

## ▼Mounting type

Fixed thread / active thread  
connection mounting

## ▼Connection

Material: SS304 / SS316  
M20\*1.5 male thread /  
G1/2" male thread  
1/2" NPT male thread  
Other specification is available  
made-to-order

## ▼Electrical connector

Aluminum alloy junction box  
Outlet female thread: M20\*1.5  
Applicable wire diameter:  
Φ6-8mm

## ▼Temperature range

-50 to 400°C

Min. measurement range:  
100°C

## ▼Stem

Outer diameter:  
Φ6 / 8 / 10 / 12 / 16mm  
Material: Same as material of  
connection  
Length:  
Customized, 50...3000mm  
Install a thermowell (Option)

## ▼Applicable media

Liquid and gas that compatible  
with material of connection

## ▼Ambient temperature

Standard: -40 to 85°C  
With LCD display: -20 to 70°C

## ▼Storage temperature

Standard: -40 to 100°C  
With LCD display: -40 to 85°C

## ▼Ambient humidity

0...95% R.H.

## ▼Protection level

IP67

## Other Specifications

## ▼Analog signal output

4-20mA

## ▼Digital signal output

(Option)

RS485

## ▼Screen display (Option)

5-digit LCD display with  
backlight

Size: 39 x 23 mm

## ▼Wiring protection

M20\*1.5 waterproof connector

## ▼Extension tube (Option)

Outer diameter: Φ12mm

Material: SS316

Length:

50 / 100 / 150 / 200mm

## ▼Measuring elements

Pt100

## ▼Power supply

10~30VDC

## ▼Stability

±0.05% F.S. / year

## ▼Accuracy

±0.5% F.S. (Standard)

## ▼Temp. response time

≤10s@ water flow 0.4m/s

## ▼Insulation resistance

≥20MΩ, 100VDC

## ▼Power consumption

≤500mW@24VDC, 20.8Ma

## ▼Weight

About 1.29kg

## ▼Other requests (Option)

Third party notarized

documents

Inspection report

Tag

RS485 output

Connection material: SS316

Install a thermowell

Active thread

Flameproof, 1/2" NPT (F) one

side, stainless steel blind plug

another side

Flameproof, M20x1.5 (F) one

side, stainless steel blind plug

another side

Degreasing treatment

Wetted part electrolytic

polishing

## Integrated Digital Temperature Transmitter (Thread Connected Type) Model: ITT-L200 (T) Introduction

ITT-L200 (T) series digital temperature transmitter adopts PT100 temperature sensor, LCD display is optional. It adopts an integrated transient voltage terminal module and can be used in severe surge voltage situations. It is suitable for various industrial temperature measurement and transmission requirements.



Due to the variety of customization, the picture is only for reference, please confirm the actual item with our sales. (If there is any change on specification, please take the latest version as standard.)

## Features

- Thread connection type, active thread is optional
- Customized stem length and outer diameter, and install a thermowell is available
- Wide temp. measurement range: -50 to 400°C
- Output signal: 4-20mA
- Temperature measuring element adopts Pt100, accuracy 0.5%F.S.
- User friendly interface, parameters are easy to set and its value could show immediately when it with LCD display
- Protection level: IP67
- Digital RS485 output is available

## Damping time

Item	Function description
Total damping time constant	Equal to the sum of damping time of amplifier and sensor capsule
Reaction time	≤10s@water flow 0.4m/s, outer diameter φ6mm

## Reaction time—Thermal protection tube

Outer diameter	Reaction time	Reducing pipe (5.3mm)	Cone-shaped tube (6.6mm or 9mm)	Straight tube
10mm (wall thickness 1mm)	t50 t90	7.5s 21s	11s 37s	18s 55s
12mm (wall thickness 1mm)	t50 t90	7.5s 21s	- -	18s 55s
16mm (wall thickness 1mm)	t50 t90	- -	11s 37s	38s 125s

## Mounting requirements

Item	Function description
Mounting direction	None
Mounting position	Pipe, tube or others
Insertion length*	The smallest insertion length should 8 times outer diameter of thermal protection tube, and the end of the probe should reach or surpass the pivot of the tube.
*Please consider technique data and process connection parameters (such as medium flow rate, process pressure and so on) before confirm the insertion length of the transmitter.	

## EMC environment

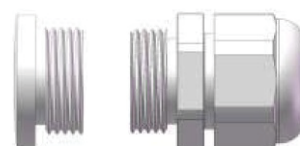
No.	Test items	Basic standards	Test conditions	Performance level
1	Radiated interference (Case)	GB/T9254/CISPR22	30MHz-1000MHz	OK
2	Conducted interference (DC power port)	GB/T9254/CISPR22	0.15MHz-30MHz	OK
3	Electrostatic discharge immunity test (ESD)	GB/T17626.2/IEC61000-4-2	4kV (Contact), 8kV (Air)	B (*2)
4	Immunity to radio frequency EM-fields	GB/T17626.3/IEC61000-4-3	10V/m (80MHz-1GHz)	A (*1)
5	Power frequency magnetic field immunity test	GB/T17626.8/IEC61000-4-8	30A/m	A (*1)
6	Electrical fast transient / Burst immunity test	GB/T17626.4/IEC61000-4-4	2kV (5/50ns, 100kHz)	B (*2)
7	Surge immunity requirements	GB/T17626.5/IEC61000-4-5	1kV (Line to line) 2kV (Line to ground) (1.2us/50us)	B (*2)
8	Immunity to conducted disturbances induced by radio frequency fields	GB/T17626.6/IEC61000-4-6	3V (150kHz-80MHz)	A (*1)

(\*1): Performance level A: The performance within limits of normal technical specifications.

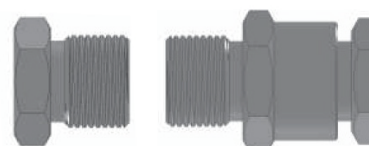
(\*2): Performance level B: Temporary reduction or loss of functionality or performance, it can be restore itself. The actual operating conditions, storage and data will not be changed.

## Wiring protection

Thread specifications	Material	Applicable wire diameter	Protection level
M20*1.5 waterproof connector	PVC	6-8mm	IP67
1/2" NPT flameproof	Stainless steel		
M20*1.5 flameproof	steel		



Waterproof connector



Flameproof

## How to order

ITT-L200 (T)		Integrated Digital Temperature Transmitter (Thread Connected Type)					
Code		Connection					
M20		M20 x 1.5 male thread					
4G		G1/2" male thread					
4N		1/2" NPT male thread					
O		Others					
Code		Temperature range					
Custom		-50 to 400°C					
Code		Stem length					
Custom		50~3000mm					
Code		Stem outer diameter					
6mm		6mm					
8mm		8mm					
10mm		10mm					
12mm		12mm					
16mm		16mm					
Code		Extension tube length					
N		No					
50mm		50mm					
100mm		100mm					
150mm		150mm					
200mm		200mm					
Code		Screen display					
N		No					
Y		Yes					
ITT-L200 (T)	4N	0~100°C	100mm	6mm	N	Y	<b>Order example:</b> ITT-L200 (T)-4N-0~100°C-100mm-6mm-N-Y