

# IST-D & IST-H

## Microprocessor Based Programmable Isolated Signal Transmitter



### Features

- Model: **IST-D** is suitable for DIN Rail mounting
- Model: **IST-H** is suitable to mount inside of the Thermocouple Head (ex: model: KN head)
- Programmable for various input signals, measuring range
- Configurable without external Power Connected.
- Configurable Input: Resistance thermometer (Pt100)  
Thermocouple (J,K,T,E,B,R,S,N,C)  
Voltage/Current, mV ( V/mA not selectable, request by order. )
- Output: 2-wire loop-power technology, 4 to 20 mA or 20 to 4 mA analog output.
- High accuracy in total ambient temperature range.
- Fault signal on sensor break presettable.

### Configuration

The IST-D & IST-H transmitter are user configurable by the optional interface cable URC-1020 c/w free software "Signalwin" or handheld programmer. The Interface cable consist of interface converter and USB plug, and no need connecting a power source during configuration.

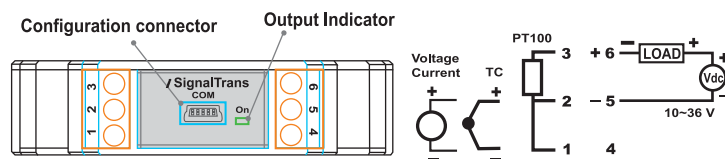
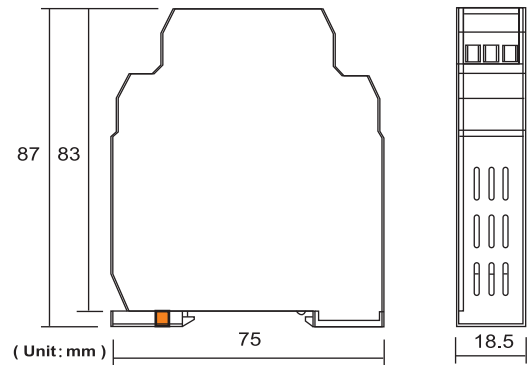


**IST-D**



Optional Interface Cable (URC-1020)

Specification	
Input	Thermocouple (T/C) : industry standard thermocouple types J, K, T, E, B, R, S, N, C (ITS-90).
	Pt100: Excitation 180uA. 2 or 3 wire connection (ITS-90 $\alpha=0.00385$ ).
	Voltage: -60mVdc to 60mVdc or -10Vdc to 10Vdc.
	Current: 0-24mAdc
Accuracy	Refer to Table in ordering information
A/D Resolution	16 bits
Input Sampling Rate	<200ms
Power Supply	DC 10 to 36V
Max. Load	(V-10)/0.02 ( $\Omega$ )
Output Resolution	0.6 $\mu$ A(15 bits)
Output Response Time	<200ms
Common Mode Rejection Ratio(CMRR)	>80dB
Electromagnetic Compatibility (EMC)	En 50081-2, En 50082-2
Galvanic Isolation	3.75 KV. between input and output
Operating Temperature	-40 to 85°C
Humidity	0 to 90% RH



**IST-H**



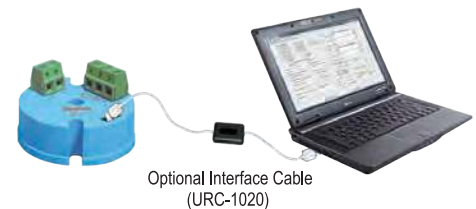
### Ordering information



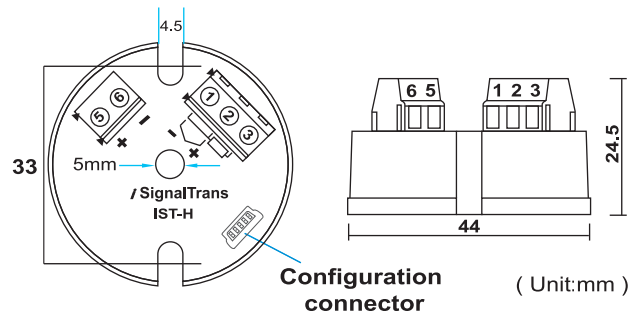
Input Signal	Code	Temperature Range	Accuracy
Thermocouple J	<b>J</b>	-50 to 1000°C (-58 to 1832°F)	±1°C
Thermocouple K	<b>K</b>	-50 to 1370°C (-58 to 2498°F)	±1°C
Thermocouple T	<b>T</b>	-270 to 400°C (-454 to 752°F)	±1°C
Thermocouple E	<b>E</b>	-50 to 960°C (-58 to 1760°F)	±1°C
Thermocouple B	<b>B</b>	0 to 1750°C (32 to 3182°F)	±2°C
Thermocouple R	<b>R</b>	-50 to 1750°C (-58 to 3182°F)	±2°C
Thermocouple S	<b>S</b>	-50 to 1750°C (-58 to 3182°F)	±2°C
Thermocouple N	<b>N</b>	-50 to 1300°C (-58 to 2372°F)	±2°C
Thermocouple C	<b>C</b>	-50 to 1800°C (-58 to 3272°F)	±2°C
Pt100	<b>D</b>	-200 to 600°C (-328 to 1112°F)	±0.2°C
mV	<b>L</b>	-60mV to 60mV	±0.01mV
Voltage	<b>V</b>	-10 to 10Vdc	±1mV
Current	<b>M</b>	0 to 24mAdc	±10 $\mu$ A

Note: The accuracy is not guaranteed between range under 400°C/752°F

Output	Code
4 to 20 mA	<b>A</b>
20 to 4 mA	<b>B</b>
Other	<b>C</b>



Optional Interface Cable (URC-1020)



Configuration connector

※ Please specify the Input/Range/Output if factory setting is requested.