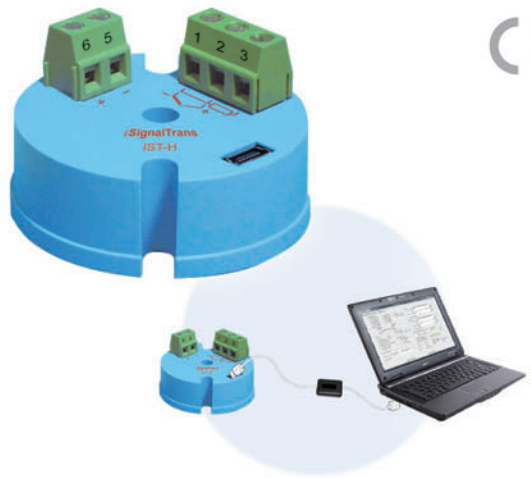
ℰSignalTrans®

IST-H Microprocessor Based Programmable Isolated Signal Transmitter

Features

- Programmable for various input signals, measuring range
- Suitable to Mount Inside a KN box.
- Programmable for various input signals, measuring range
- Configurable without external Loop Power Connected.
- 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.



CE

Configuration

The **ℰSignalTrans®** IST-H transmitter is user configurable with the **ℰSignalwin®** software and interface cable URC-1020 or handheld programmer. The **ℰSignalwin®** is user-friendly software. The latest release version can be download free from website. Interface cable consist of interface converter and USB plug. It can be purchased separately from the **ℰSignalTrans®** supplier. During configuration the transmitter can work alone without connecting to a power source.

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 α=0.00385).
	Voltage: -60mVdc to 60mVdc or -10Vdc to 10Vdc.
	Current: 0-24mAdc
Accuracy	Refer to Table 1 Input Signal
A/D Resolution	16 bits
Input Sampling Rate	<200ms
Power Supply	DC 10 to 36V
Max. Load	(V-10)/0.02 (Ω)
Output Resolution	0.6 μ 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

Table 1 Input Signal

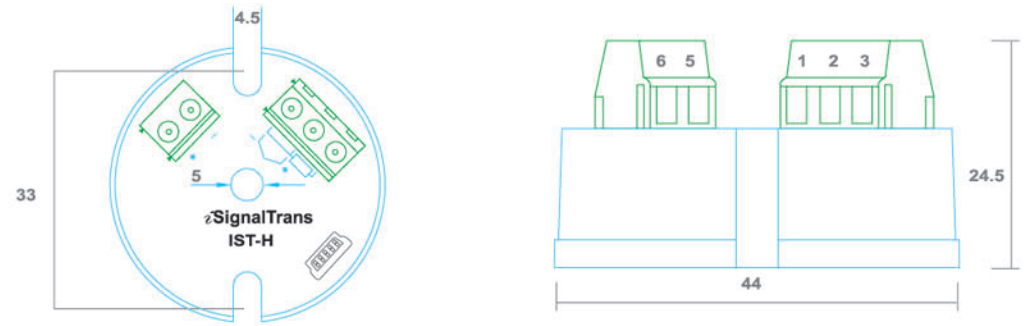
Input signal	Maximum Range	Accuracy
Thermocouple J	-50 to 1000 °C (-58 to 1832 °F)	±1 °C
Thermocouple K	-50 to 1370 °C (-58 to 2498 °F)	±1 °C
Thermocouple T	-270 to 400 °C (-454 to 752 °F)	±1 °C
Thermocouple E	-50 to 700 °C (-58 to 1292 °F)	±1 °C
Thermocouple B	0 to 1750 °C (32 to 3182 °F)	±2 °C(Note 1)
Thermocouple R	-50 to 1750 °C (-58 to 3182 °F)	±2 °C
Thermocouple S	-50 to 1750 °C (-58 to 3182 °F)	±2 °C
Thermocouple N	-50 to 1300 °C (-58 to 2372 °F)	±2 °C
Thermocouple C	-50 to 1800 °C (-58 to 3272 °F)	±2 °C
Pt100	-200 to 600 °C (-328 to 1112 °F)	±0.2 °C
mV	-60mVto 60mV	±0.01mV
Voltage (Note 2)	-10 to 10Vdc	±1mV
Current (Note 2)	0 to 24mAdc	±10 μ A

Note 1 :Accuracy is not guaranteed between 0 and 400 °C (0 and 752 °F) for type B.

Note 2 : Not selectable, Special request please contact your supplier.

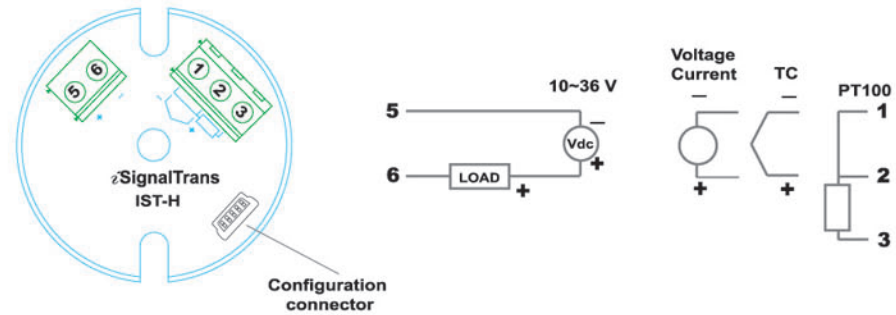
VERTEX

Dimension



(Unit : mm)

Electrical Connection

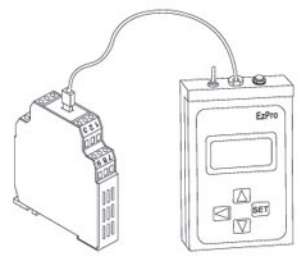


Ordering Information

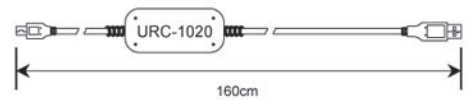
IST-H

The unit will come standard with PT100, -200~600°C, you can change the input Type/Rang using the free software "**ℰSignalwin®**" with the configuration cable URC-1020, or you can contact us for non-standard Input/Rang setting.

【Accessory】



EzPro Handheld Programmer



URC-1020 Interface Cable