

2-wire in-head Temperature Transmitter

The **2-wire in-head temperature transmitter** is based on Microprocessor with flexibility for accepting the signal mV, Pt100 and a variety of Thermocouples. It delivers a scalable linear 4~20mA output current proportional to the sensor temperature.

Available option for a user-friendly configuration software is provided for parameter setup including sensor type, temperature range, filter ... etc.

SPECIFICATION

Sensor Input	Type - Description	Accuracy (Max. Range)
Thermocouple	Type J / K / R / S / T / N / E, according to IEC60584 (ITS-90). Impedance: $1M\Omega$	< 0.3%
Pt100	2 or 3-wire connection (Connect terminal 2 & 3 for 2-wire Sensor), Excitation $180\mu A$ $\alpha = 0.00385$ according to IEC 60751 (ITS-90)	0.2%
Voltage	0 ~ 50mVdc, Impedance: $1M\Omega$	0.2%

Response Time: <100ms.

Output: 2-wire 4~20mA, linear with respect to the measured temperature

Resolution: 0.004mA (12bits)

Power Supply: 12~35Vdc across the transmitter

Max. Load (RL): $RL(max.) = (Vdc - 12) / 0.02 [\Omega]$ Vdc = Power supply voltage

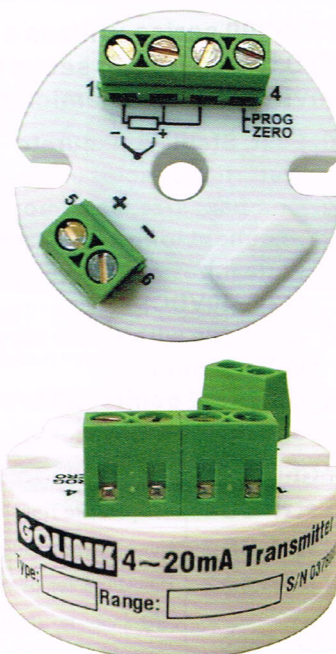
Operation Temperature & Humidity: -40 to 85°C, 0 to 90% RH

Electromagnetic compatibility: EN 50081-2, EN 50082-2

Housing: ABS plastic (Dimension: Dia.44mm x Height 25mm)

No isolation between the sensor and the 4~20mA loop.

Internal protection against polarity inversion, cold junction compensation for the thermocouple.



ORDER CODE

TX- - Required Range

CODE	Sensor Type / Range	Min. Measurement span	Required Range
K	Thermocouple K / 0~1370°C	100°C	
J	Thermocouple J / 0~760°C	100°C	
R	Thermocouple R / 0~1760°C	400°C	
S	Thermocouple S / 0~1760°C	400°C	
T	Thermocouple T / 0~400°C	100°C	
N	Thermocouple N / 0~1300°C	100°C	
E	Thermocouple E / 0~720°C	100°C	
D	Pt100 / -200~530°C	40°C	
L	Voltage / 0~50mV	5mV	

Wiring Diagram

