

XP Series Thermocouple Signal Isolator Data Sheet

1. General

XP Series Thermocouple Signal Isolator (one input one output, one input two outputs) receives thermocouple signal from the industrial field, outputs 1:1 thermocouple signal after isolation. It can convert thermocouple signal into a standard process signal that have a linear relationship with the temperature. It is widely used in data acquisition, signal transmission and conversion, PLC, DCS and other industrial measurement and control systems in the fields of machinery, electricity, telecommunications, petroleum, chemical industry, steel, sewage treatment, building construction, etc. It is used to perfect and supplement the function of the system I/O plug-in, improve the anti-interference ability of the automatic control system, and ensure the stability and reliability of the system.



2. Features

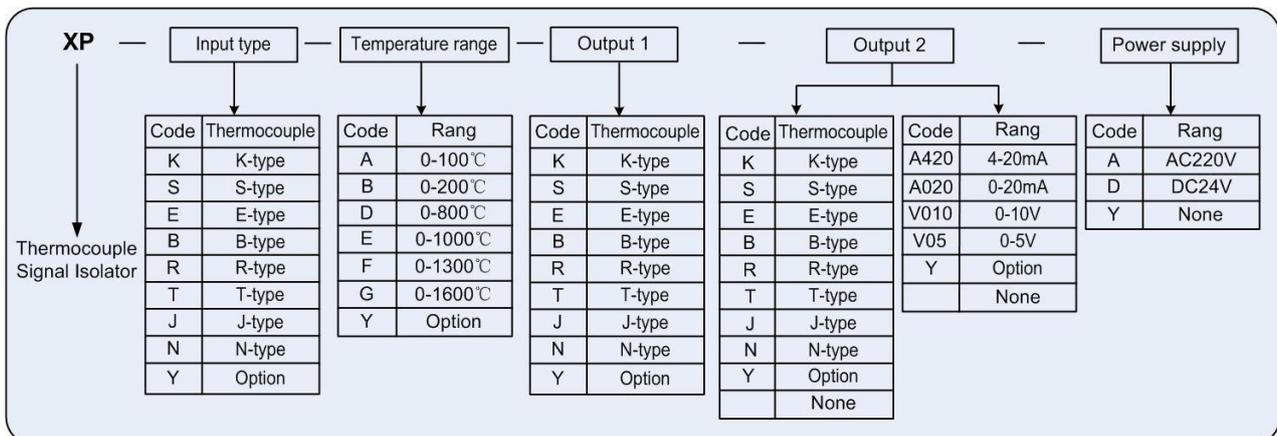
- ◆ Input, output and power are completely isolated, with strong anti-interference ability
- ◆ High accuracy, high linearity, long - term running stability
- ◆ Modular design, small size, low power consumption, suitable for intensive installation
- ◆ Plug-in construction, easy installation, disassembly and maintenance

3. Specifications

Power supply: DC24V±10%, AC220V	±40μV (thermocouple output)
Power consumption: ≤2.2W	Temp. coefficient: ≤±100PPM/°C
Input: thermocouple	Insulation resistance: ≥100MΩ/500VDC
Cold junction compensation: internal (NTC)	Dielectric strength: input/output/power ≥1500VAC (1min)
0~50°C, error < 1°C	Operating temperature: 0~50°C
Output: thermocouple, DC voltage, DC current	Storage temperature: -40~85°C
Load resistance: voltage output ≥10KΩ	Operating humidity: 10~90%RH
current output ≤350Ω	Atmospheric pressure: 86~106kPa
Accuracy: ±0.2%F.S (ΔR>10mV)	Installation: DIN 35mm rail
±0.4%F.S (10mV≥ΔR>5mV)	Dimension: 122mm×18mm×96mm

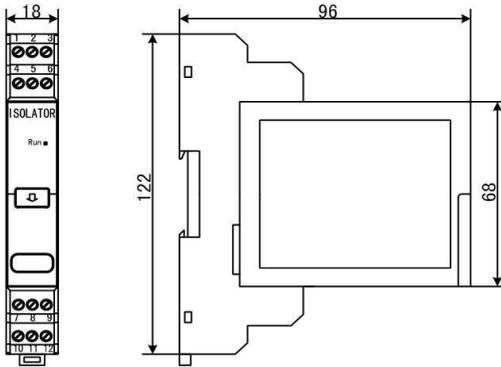
4. Ordering Information

XP series code table :

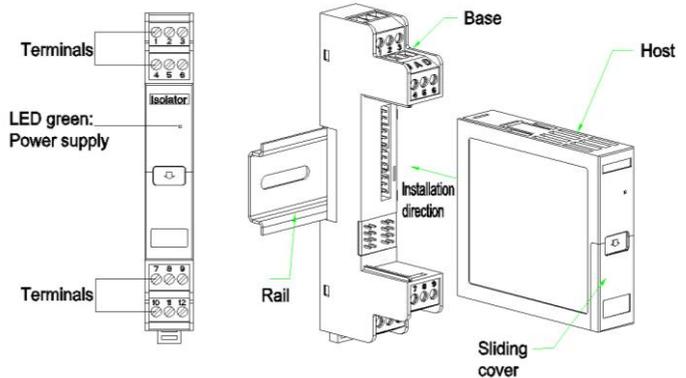


5. Dimension & Installation

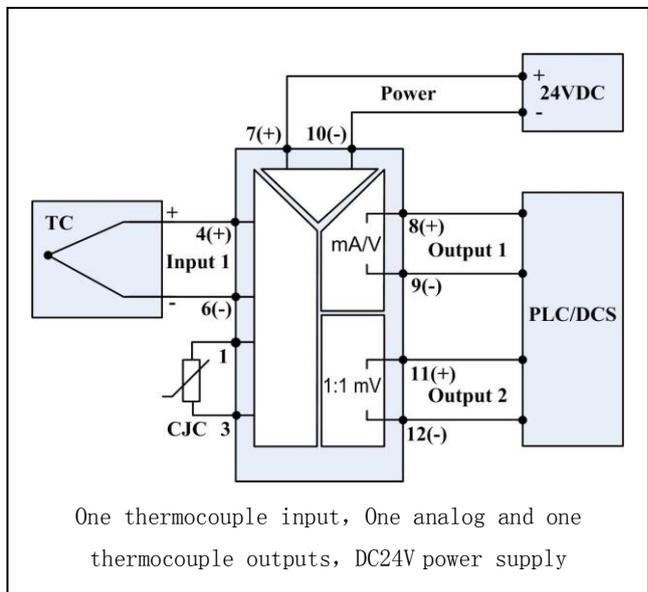
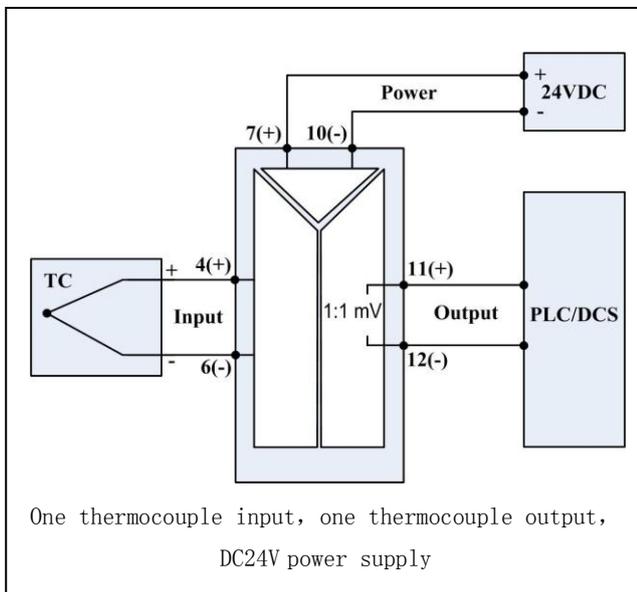
Dimension (122mm×18mm×96mm)



Installation



6. Typical Connection



Note: The connection diagrams given in this manual are typical. When installing, please refer to the connection diagram on the product.

7. Examples of ordering

Refer to the code table above and provide the model number correctly.

Example 1 input: K-type thermocouple, 0~800℃, output: one channel K-type thermocouple, power supply: 24VDC
order model: XP-K-D-K-D

Example 2 input: S-type thermocouple, 0~1300℃, output1: K-type thermocouple, output2: 4-20mA,
power supply: 24VDC
order model: XP-S-F-S-A420-D

Example 3 input: E-type thermocouple, 0~700℃, output: two channels E-type thermocouple,
power supply: 24VDC
order model: XP-E-Y-E-E-D (Y=0-700℃) (abbreviated as: XP-E-Y-2E-D)



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