

XP Series RTD Signal Isolator Data Sheet

1. General

XP Series RTD Signal Isolator (one input one output, one input two outputs) receives the 3-wire Pt100, Cu50, Pt1000 and other types RTD signal from the industrial field, outputs 1:1 RTD signal after isolation. The RTD output can be wired as 2-wire system, 3-wire system or 4-wire system. It can convert RTD 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

Power consumption: ≤2.2W

Input: RTD

Exciting current: 0.5~5mA

Leadwire resistance: $\leq 20\Omega$ / wire Output: RTD, DC voltage, DC current Load resistance: voltage output $\geq 10 K\Omega$

current output ≤350Ω

Accuracy: $\pm 0.2\%$ F.S (Δ R $>40<math>\Omega$)

 $\pm 0.4\%$ F.S $(40\Omega{\geqslant}\Delta R{>}20\Omega)$

 $\pm 0.5\Omega$ (RTD output)

Temp. coefficient: ≤±100PPM/℃

Insulation resistance: ≥100MΩ/500VDC

Dielectric strength: input/output/power ≥2000VAC (1min)

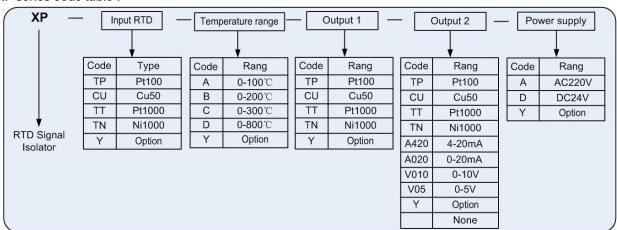
Operating temperature: 0~50°C Storage temperature: -40~85°C Operating humidity: 10~90%RH Atmospheric pressure: 86~106kPa

Installation: DIN 35mm rail

Dimension: 122mm×18mm×96mm

4. Ordering Information

XP series code table :



Addr: Building B, Ascendasi Hub, No. 5 Xinghan Road, SIP

Tel: +86-512-68381801 +86-512-68381802

- 1 - Fax: +86-512-68381803

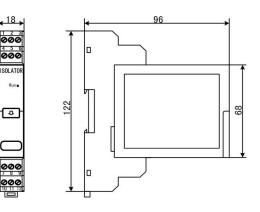
+86-512-68381939

Web: http://www.surpon.com

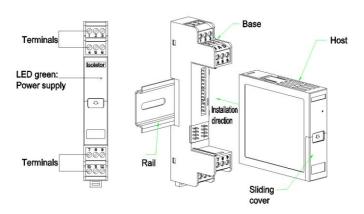


5. Dimension & Installation

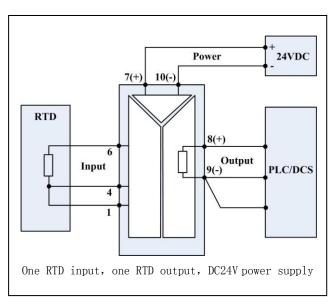
Dimension (122mm×18mm×96mm)

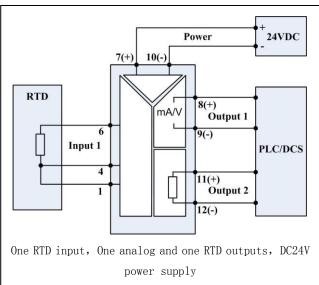


Installation



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: Pt100,0-200℃, output: one channel Pt100, power supply: 24VDC order model: XP-TP-B-TP-D

Example 2 input: Pt100,0-100°C, output 1: PT100, output 2: 4-20mA, power supply: 24VDC order model: XP-TP-A-TP-A420-D

Example 3 input: Pt100,0-150°C, output 1: PT100, output 2: Pt100, power supply: 24VDC order model: XP-TP-Y-TP-D(Y=0-150℃)(abbreviated as: XP-TP-Y-2TP-D)

