# **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:  $\leq$ 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  $\geq$ 10K $\Omega$ current output  $\leq$ 350 $\Omega$ Accuracy: ±0.2%F.S ( $\Delta$ R>40 $\Omega$ ) ±0.4%F.S (40 $\Omega \geq \Delta$ R>20 $\Omega$ )

# 4. Ordering Information

#### XP series code table :



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 $\pm 0.5\Omega$  (RTD output)

Temp. coefficient:  $\leq \pm 100$  PPM/°C Insulation resistance:  $\geq 100$  MΩ/500VDC Dielectric strength: input/output/power  $\geq 2000$  VAC (1min) Operating temperature:  $0 \sim 50$  °C Storage temperature:  $-40 \sim 85$  °C Operating humidity:  $10 \sim 90$ %RH Atmospheric pressure:  $86 \sim 106$  kPa Installation: DIN 35mm rail Dimension: 122 mm×18mm×96mm

## 5. Dimension & Installation

#### $\label{eq:Dimension} \textbf{Dimension} ~(122 \text{mm} \times 18 \text{mm} \times 96 \text{mm})$

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.

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## 7. Examples of ordering

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

input: Pt100,0-200 $^\circ\!\!\mathbb{C}$ , output: one channel Pt100, power supply: 24VDC
order model: XP-TP-B-TP-D
input: Pt100,0-100 $^\circ\!\mathrm{C}$ , output 1: PT100, output 2: 4-20mA, power supply: 24VDC
order model: XP-TP-A-TP-A420-D
input: Pt100,0-150 $^\circ\!{\rm C}$ , output 1: PT100, output 2: Pt100, power supply: 24VDC

order model: XP-TP-Y-TP-TP-D (Y=0-150°C) (abbreviated as: XP-TP-Y-2TP-D)



Please Scan

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