XP Series RTD Isolated Transmitter Data Sheet

1. General

XP Series RTD Isolated Transmitter (one input one output, one input two outputs) makes use of the characteristic that the resistance value of RTD (Pt100, Cu50, Pt1000, Ni1000, etc.) changes with the temperature, receives RTD signal from the industrial field, and converts 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: Pt100, Cu50, Pt1000, Ni1000, etc.
Exciting current: ≤200μA
Leadwire resistance: ≤20Ω / wire
Output: DC voltage, DC current
Load resistance: voltage output ≥10KΩ
current output ≤350Ω
Accuracy: ±0.2%F.S（ΔR＞40Ω）
±0.4%F.S（40Ω≥ΔR＞20Ω）
Temp. coefficient: ≤±100PPM/℃

Insulation resistance: ≥100MΩ/500VDC
Dielectric strength: input/output ≥2000VAC（1min）
input/power ≥2000VAC（1min）
output/power ≥1000VAC（1min）
Operating temperature: 0~50℃
Storage temperature: -40~85℃
Operating humidity: 10~90%RH
Atmospheric pressure: 86~106kPa
Installation: DIN 35mm rail
Dimension: 122mm×18mm×96mm

4. Ordering Information

XP series code table :

XP — Input RTD — Temperature range — Output 1 — Output 2 — Power supply

RTD Isolated Transmitter

Code	Type
TP	Pt100
TT	Pt1000
TN	Ni1000
Y	Option

Code	Rang
A	0-100℃
B	0-200℃
C	0-300℃
D	0-800℃
Y	Option

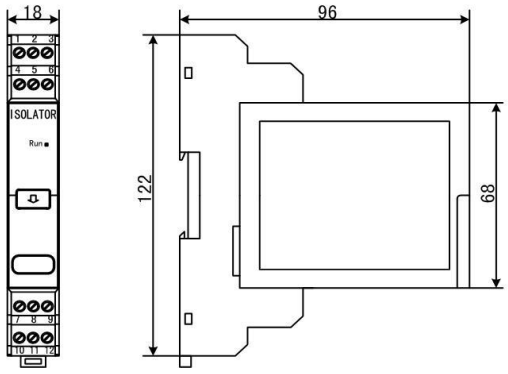
Code	Rang
A420	4-20mADC
A020	0-20mADC
A010	0-10mADC
V010	0-10VDC
V15	1-5VDC
V05	0-5VDC
TP	Pt100
L420	2-wire 4-20mA
Y	Option

Code	Rang
A420	4-20mADC
A020	0-20mADC
A010	0-10mADC
V010	0-10VDC
V15	1-5VDC
V05	0-5VDC
Y	Option
	None

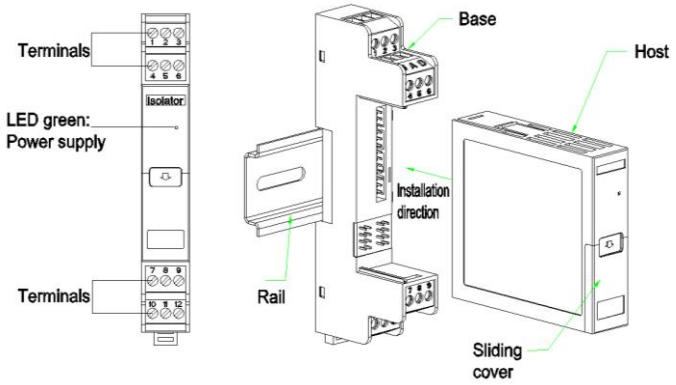
Code	Rang
A	AC220V
D	DC24V
Y	Option
	Output Loop

5. Dimension & Installation

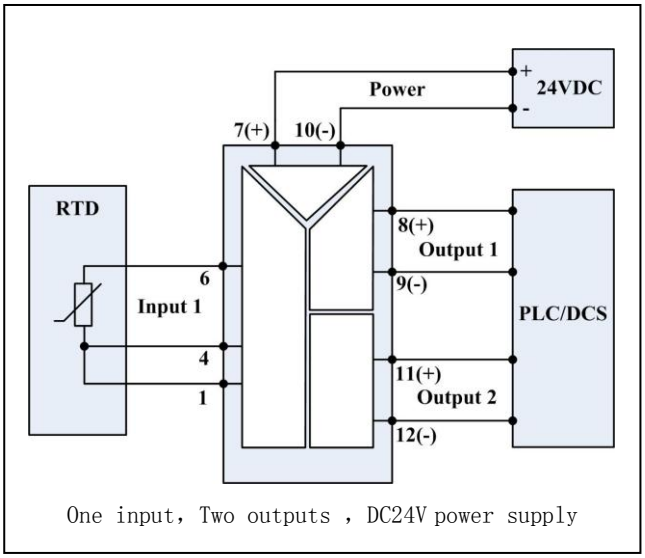
Dimension（122mm×18mm×96mm）



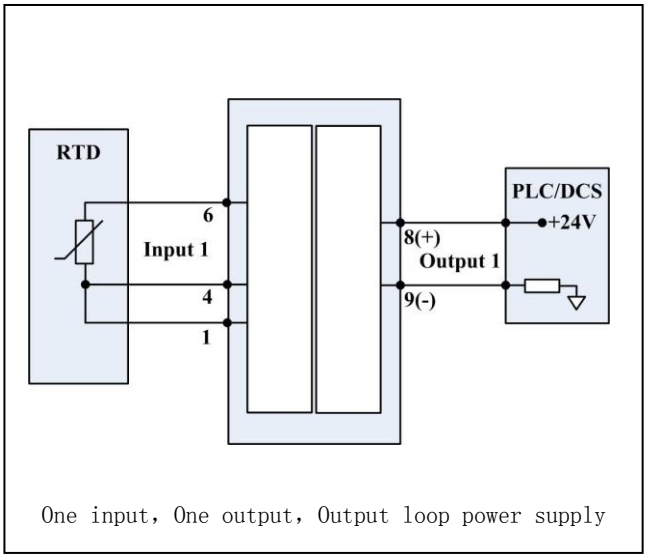
Installation



6. Typical Connection



One input, Two outputs , DC24V power supply



One input, One output, Output loop power supply

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 4-20mA, power supply: 24VDC
order model: XP-TP-B-A420-D

Example 2 input: Pt100, 0~100℃, output: two channels 4-20mA, power supply: 24VDC
order model: XP-TP-A-A420-A420-D（abbreviated as: XP-TP-A-2A420-D）

Example 3 input: Pt1000, 0~150℃, output: two channels 4-20mA, power supply: 24VDC
order model: XP-TT-Y-A420-A420-D（Y=0~150℃）（abbreviated as: XP-TT-Y-2A420-D）

Example 4 input: Ni1000, -50~130℃, output: one channel 2-wire 4-20mA, power supply: output loop
order model: XP-TN-Y-L420（Y=-50~130℃）

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