

Thermal resistance temperature signal isolation transmission distributor

(One PT100 input, two analog signal outputs, DIN rail mounted)

Main features:

- >Input: Pt100 (-200~+600 °C) (range selectable)
- >You can also choose to input Pt1000, Pt10, Cu50, Cu100, etc.
- >Output signal: 4~20mA, 0~5V, 0-10V and other standard signals
- >Auxiliary power supply: 5V, 9V, 12V, 15V or 24V DC single power supply
- >Industrial temperature range: -40~+85 °C
- >Accuracy level: 0.2 level (FSR%, relative to temperature)>>>Includes linearization and long line compensation function
- >Isolation withstand voltage: 2500VDC (1mA, 60S), input/output 1/2/power supply 4 isolation
- >Installation method: DIN35 rail installation
- >Dimensions: 106.7x79.0x25.0mm



Figure 1 Module appearance diagram

Overview:

The thermal resistance temperature transmitter product developed by Weijunrui Technology is mainly used for isolating and transmitting sensor signals such as Pt100, Pt1000, Pt10, Cu50, Cu100 (sensors need to be equipped by users themselves), and is mainly used in industry to measure temperatures from -200~+600 °C. The transmitter has linearization and long line compensation functions, and is calibrated according to the Pt100 national standard calibration table at the factory, fully meeting the accuracy requirement of 0.2 level. The input, output 1, output 2, and auxiliary power supply are completely isolated (four isolated) and can withstand an isolation withstand voltage of 2500VDC. The product adopts the DIN35 international standard guide rail installation method, with small size, high precision, stable performance, and high cost-effectiveness. It can be widely used in industries such as petroleum, chemical, power, instrumentation, and industrial control. The

DIN12 series temperature signal isolation amplifier is very convenient to use. Simply connect the wires to achieve isolated transmission of thermal resistance signals.

Product selection:

DIN12 - Z□ - T□ - P□ - A/V□

Input type: Z		Temperature range: T		Power supply: P		Output model: A or V			
	code	T	code	P	code	Current: A	code	Voltage: V	code
PT100	Z1	-20<-100°C>	T1	24VDC	P1	0-20ma	A3	0-5V	V1
PT10	Z2	0<-100°C>	T2	12VDC	P2	4-20ma	A4	0-10V	V2
Cu100	Z3	0<-150°C>	T3	5VDC	P3	User defined	Au	1-5V	V6
Cu50	Z4	0<-200°C>	T4	15VDC	P4			User defined	Vu
Pt1000	Z5	0<-400°C>	T5						

		User defined	Tu					
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Selection Example 1:

Input: Pt100 Temperature Range: -20~100 °C Power Supply Voltage: 24V Output: 4-20mA

Model: DIN12-Z1-T1-P1-A4

Selection Example 2:

Input: Pt1000 Temperature Range: 0~200 °C Power Supply Voltage: 12V Output: 0-10V

Model: DIN12-Z5-T4-P2-V2

General parameters:

Accuracy ---0.2% (relative to temperature)

Input three wire, four wire, or two wire thermistor signals, which can be selected from thermal resistors such as Pt100, Pt1000, Pt10, Cu50, Cu100, etc.

When placing an order, it is necessary to select a temperature range that corresponds to the output.

Output standard voltage or current signals. It can also be customized by users.

Response time ----- ≤ 100mS

Auxiliary power supply - DC5V, 9V, 12V, 15V, 24V

Power -----<2W

Temperature drift -50ppm/°C (typical value)

Load capacity - Voltage output: ≥ 2 k Ω

Current output: ≤ 450 Ω

Isolation - signal input/output 1/output 2/auxiliary power supply four isolation

Isolation voltage -2500VDC, 1 minute, leakage current 1mA

Surge resistant voltage -3KV, 1.2/50us (peak value)

Working temperature: 40~+85 °C

Storage temperature: 40~+85 °C

Working humidity -10~90% (no condensation)

Storage humidity -10~95% (no condensation)

Product wiring diagram:

Pin definition:

Pin	Pin function		Pin	Pin function	
one	Out2+	Output signal 2 positive terminal	seven	A	Thermal resistor input A terminal
two	Out2-	Output signal 2 negative terminal	eight	B	Thermal resistor input B terminal
three	GND	Negative terminal of auxiliary power supply	nine	B	Thermal resistor input B terminal
four	Out1+	Output signal 1 positive terminal	ten	NC	Empty feet
five	Out1-	Output signal 1 negative terminal	eleven	NC	Empty feet
six	Vcc	Positive terminal of auxiliary power supply	twelve	NC	Empty feet

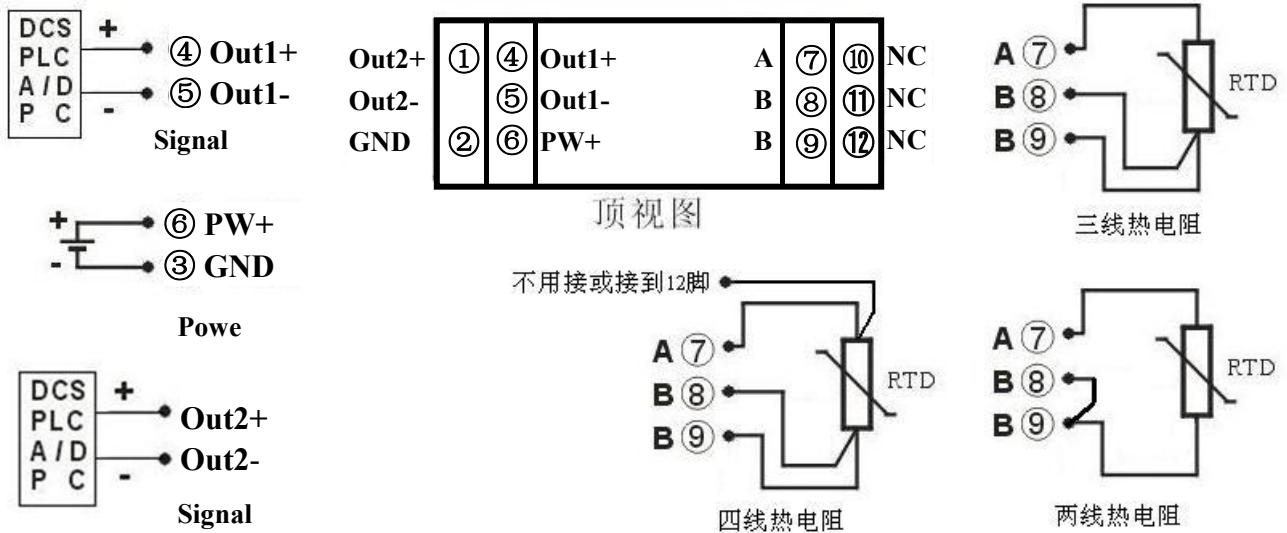
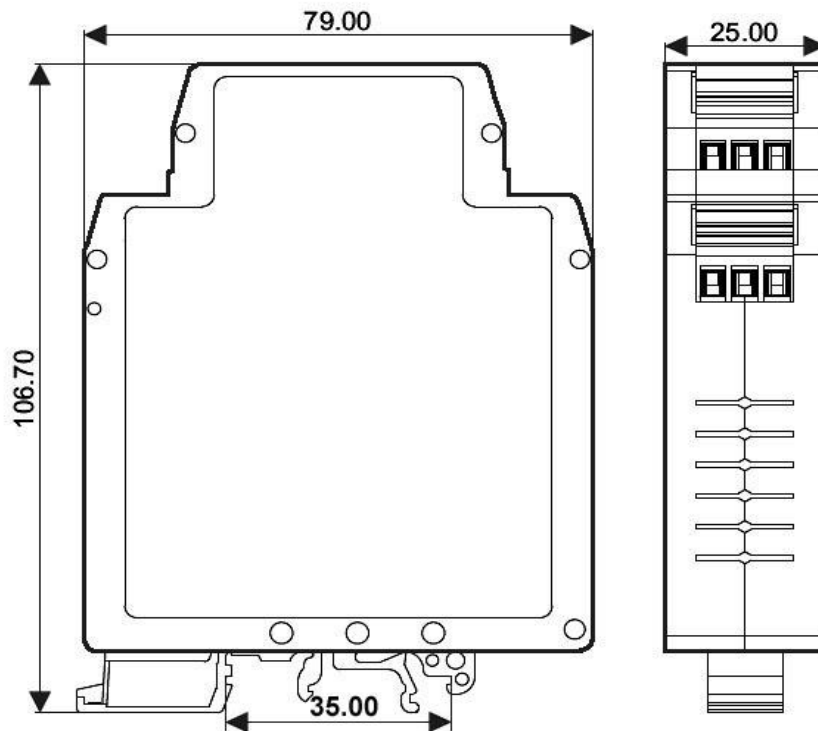


Figure 2: Module Wiring Diagram

Note:

1. When using a two-wire, three wire, or four wire thermistor input, refer to the wiring diagram separately.
2. Three wire thermoelectric blocking line detection:
 - a. Output maximum value: broken wire connected to pin 1 or 3;
 - b. Output minimum value: The wire connected to pin 2 is broken.

Dimensions: (Unit: mm)



Can be installed on standard DIN35 rails

guarantee:

Within two years from the date of sale, if the user complies with the storage, transportation, and usage requirements and the product quality is lower than the technical specifications, it can be returned to the factory for free repair. If damage is caused due to violation of operating regulations and requirements, device fees and maintenance fees shall be paid.

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