MCT80D Temperature Transmitter Module

MCT80D temperature transmitter module is a temperature transmitter unit which can be on-site installed on DIN rail. It adopts two-wire output of 4～20mADC or user specified which have been already extensively applied in the petroleum, chemistry industry, metallurgy, electric power, textile industry, food processing etc.

MCT80D temperature transmitter module is a smart transmitter module with high precision and high stability. It is compatible with more than ten types of thermocouple and thermal resistance signal transducers This product USES 24 Σ - delta sampling chip, ensures high precision measurement. Anti-surge and anti-reverse connection design avoid mis-installation and mis-operation in engineering installation and enhanced software safety design is adopted to ensure long service life and stability.

Features

Floating self-adjustment circuit
Sole anti-interruption circuit
High accuracy cold end compensation circuit
Anti-corrosive case, high reliability
Intelligent, digital, and on-site programmable
Design of a 16 bit high-precision acquisition chip
12.5mm/17.5mm ultra-thin thickness, convenient for dense installation
Standard DIN35mm guide rail installation

Technical Parameters

Accuracy: RTD±0.2%，Thermocouple±0.5%
Humidity: ≤ 95% RH
Compensation: 0-60℃
Stability: ＜2%/F.S/year
Temperature drift: ≤ 50ppm/℃ (-20~+60 ℃)
Input impedance: current ≤ 60 Ω; Voltage ≥ 1M Ω
Load capacity: current ≤ 500 Ω; Voltage ≥ 1M Ω
Response time: ≤ 0.5 S
Dielectric strength: ≥ 1500V AC (between input/output/power supply, leakage current 1mA, test time 1min)
Electromagnetic compatibility: Comply with the requirements of IEC61000-4-4:1995 for Class III industrial site electromagnetic interference resistance
Power supply: 20-30V DC

Power consumption: 0.9W~1.8W (depending on the model);
Working temperature: -20~+60 ℃
Input signal:
Thermal resistor: PT100, PT1000, PT500, CU50, CU100, NI100, CNO500, NI100
Thermocouple: B, E, J, K, N, R, S, T
Output signal: 4-20mA; 0-10mA: 0-20mA: 1-5V: 0-5V: 0-10V; RS485; HART

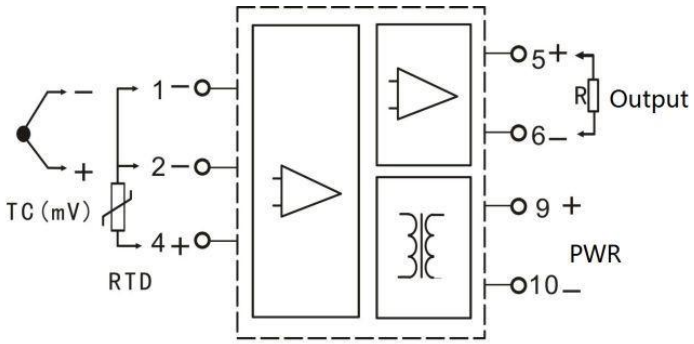
Temperature Sensor	Type	Temperature Range
Thermal Resistor (RTD)	Pt100	-200～800℃
	Cu50	-50～150℃
	Cu100	-50～150℃
	Pt1000	-50～200℃
Thermocouple (TC)	B	300～1800℃
	E	0～1800℃
	J	0～1200℃
	K	0～1300℃
	N	-200～1300℃
	R	0～1700℃
	S	0～1700℃
	T	-200～400℃

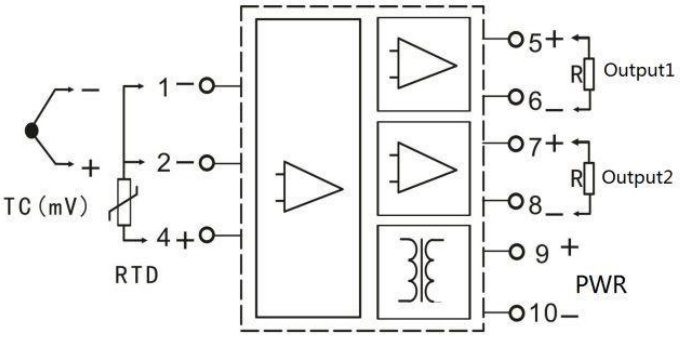
Model Selection

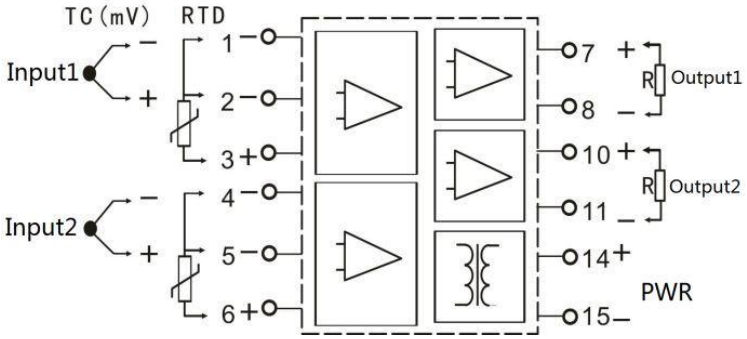
MCT80D	Temperature Transmitter Module	
-	Case	B: Black G: Green
-C	Channels	None: 1 input & 1 output 2: 1 input & 2 outputs 3: 2 input & 2 outputs 0: customer specified
-S	Output	None: 4-20mA 2-wires 2: 0-5V 3: 0-10V 4: 0-20mA 5: 0-10mA 6: 1-5V 9：RS485 H：4-20mA + HART 0: customer specified
-	(Default input)	Pt100 Pt1000 Cu50 Cu100 B E

		J K N R S T O (customer specified)
-	(Temperature range)	e.g. (0-100℃) or (0-200℉) etc.
-V	Power	1：24VDC 2：85~265VAC

Connection Mode

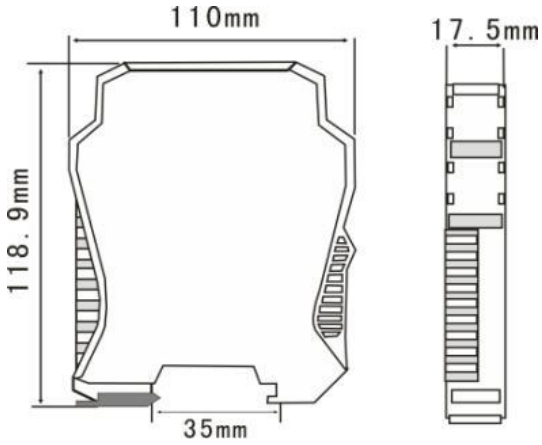




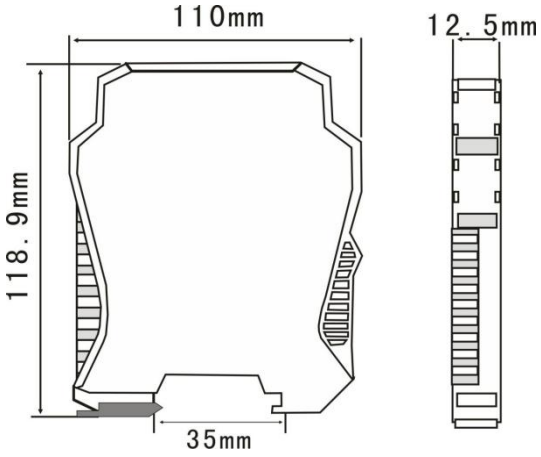


Dimensions:

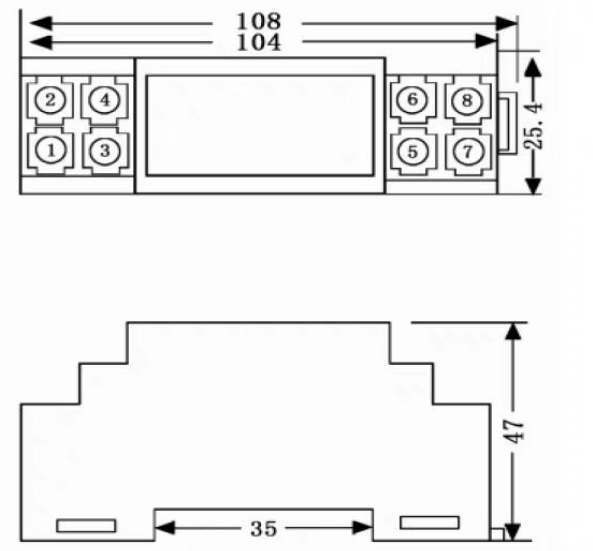
1in & 1out **1in & 2out**



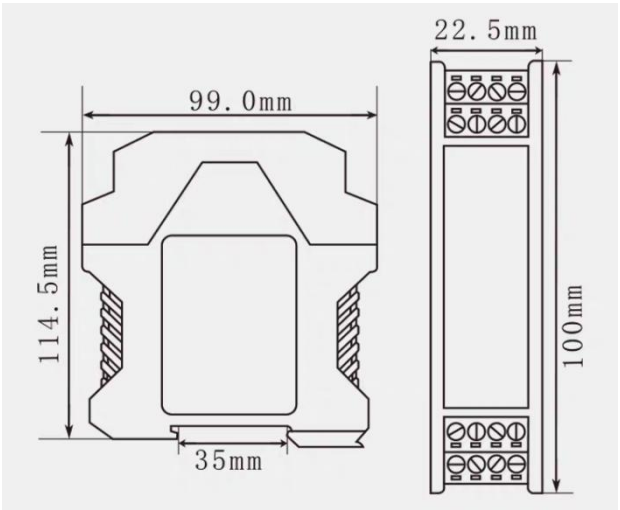
2in & 2out



Black Case Type



Green Case Type



RS485 Output:

Connection of 3-wires

Connection of 2-wires

Connection of 4-wires