

# MT-RTD RTD Converter & Isolator

## FEATURE

- 4 Popular Input and Output Ranges Programmable by dip switches
- Changeable Input Module Between V/mA, Pt100Ω, Potentiometer, Strain Gauge, easy maintain and save stock
- Low cost and high stability
- CE Approved



## SPECIFICATION

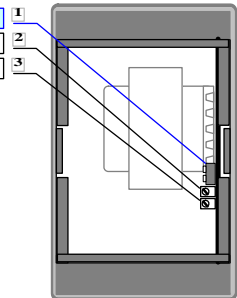
Input Range	Input Impedance	Output Range	Load Resistance
Pt100Ω -100 ~ 800°C	≥ 10M ohm	0 ~ 100 mV	≥ 100K ohm
		0 ~ 1 V	≥ 100 ohm
		0 ~ 5 V	≥ 500 ohm
		0 ~ 10 V	≥ 1K ohm
		1 ~ 5 V	≥ 500 ohm
		2 ~ 10 V	≥ 1K ohm
		-10 ~ 0 ~ +10 V	≥ 10K ohm
		0 ~ 1 mA	≤ 10K ohm
		0 ~ 10 mA	≤ 1K ohm
		0 ~ 20 mA	≤ 500 ohm
		4 ~ 20 mA	≤ 500 ohm

- Accuracy:** ±0.1% of F.S.  
**RTD type:** DIN Pt100Ω, JIS Pt100Ω  
 Option: other RTD type likes Cu10, Ni120...
- Sensing current:** About 1.5 mA  
**Response time:** ≤ 250 msec.  
**Span adjustment::** ≤ 10% of F.S.  
**Zero adjustment::** ≤ 5% of F.S.  
**Output ripple:** ≤ 0.1% of F.S.  
**Sensor break protection:** Upscale standard  
**Power Supply:** AC 115 or 230V ±10%, 50/60 Hz  
 AC 380 or 415V ±10%, 50/60 Hz  
 Option: DC 12V, 24V, 48V ±10%, (Isolated)  
 DC 5W, AC 6.5VA
- Power consumption:** DC 5W, AC 6.5VA  
**Operating temperature:** 0~60 °C  
**Operating relative humidity:** 20~95 %RH, non-condensing  
**Temperature coefficient:** ≤ 100 PPM/°C  
**Storage temperature:** -10~70 °C  
**Isolation:** Between Power / Input / Output  
**Insulation resistance:** ≥ 100M ohm at 500Vdc  
**Surge test:** 4 KV, 1.2 x 50 μs sec.  
 Common mode & differential mode  
**Dielectric Strength:** AC 2.0 KV for 1 min  
 Between Power / Input / Output / Case  
**Standard:** Comply with EN50081-1, EN50082-2  
**Dimensions:** 50mm(W) x 87mm(H) x 123mm(D)-with socket

**Mounting:** Surface and DIN rail 35mm wide  
**Weight:** 500g

## ADJUSTMENT

- Dip Switch: Programming for O/P 1 - 6 Ranges selectable
- O/P 1 Span Adjust Pot (Clockwise: o/p1 increase)
- O/P 1 Zero Adjust Pot (Clockwise: o/p1 increase)



### Programming for input (on input module)

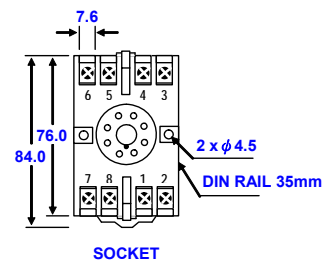
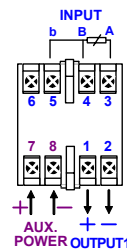
INPUT Pt100Ω : (CODE: P1)				
SIGNAL RANGE	DIP-SWITCH (INPUT) SW1	SW2	SW3	SW4
-50 ~ 0 °C	on			
-50 ~ +50 °C		on		
-50 ~ +100 °C			on	
-50 ~ +200 °C				on

INPUT Pt100Ω : (CODE: P2)				
SIGNAL RANGE	DIP-SWITCH (INPUT) SW1	SW2	SW3	SW4
0 ~ 50 °C	on			
0 ~ 100 °C		on		
0 ~ 200 °C			on	
0 ~ 400 °C				on

OUTPUT V / mA : (CODE: P)					
SIGNAL RANGE	DIP-SWITCH (OUTPUT) SW1	SW2	SW3	SW4	SW5
0 ~ 5 V		on	on	on	
1 ~ 5 V		on	on	on	
0 ~ 10 V		on	on	on	
2 ~ 10 V		on	on	on	
0 ~ 20 mA					on
4 ~ 20 mA	on				on

## CONNECTION DIAGRAM & SOCKET

### MT-RTD WITH 1 Analogue Output



## ORDERING INFORMATION

MT-RTD- [Input Range] - [Output Range] - [Aux. Power]

### Remark:

- > When you select coding P1, P2, or P for input and output range, please specify initial range.
- > After change input or output range by dip switches (D.S), re-calibration is to be requested.

Current		Voltage		Aux. Power	
CODE	INPUT RANGE	CODE	OUTPUT	CODE	AUX. POWER
A	-50 ~ +50 °C	A	0 ~ 1 mA	A1	AC 115 V
B	0 ~ 50 °C	B	0 ~ 10 mA	A2	AC 230 V
C	0 ~ 100 °C	C	0 ~ 20 mA		
D	0 ~ 200 °C	D	4 ~ 20 mA		
E	0 ~ 400 °C	E	Excitation		
F	0 ~ 600 °C	I	Specify (mA o/p)		
G	0 ~ 800 °C	P	Programmable 6 ranges (by D-S): 4-20/0-20 mA 0-5/0-10/1-5/ 2-10 V		
		H	-50 ~ +100 °C		
		I	-100 ~ +100 °C		
		J	-100 ~ +600 °C		
		O	Specify temp. range		
		P1	Programmable 4 Ranges (by D-S): -50/0/-50/-100/-200 °C		
		P2	Programmable 4 Ranges (by D-S): 0-50/-100/-200/-400 °C		

- D12 DC 12V
- D24 DC 24V
- D48 DC 48V
- D11 DC 110V
- DO Specify DC
- AO Specify AC