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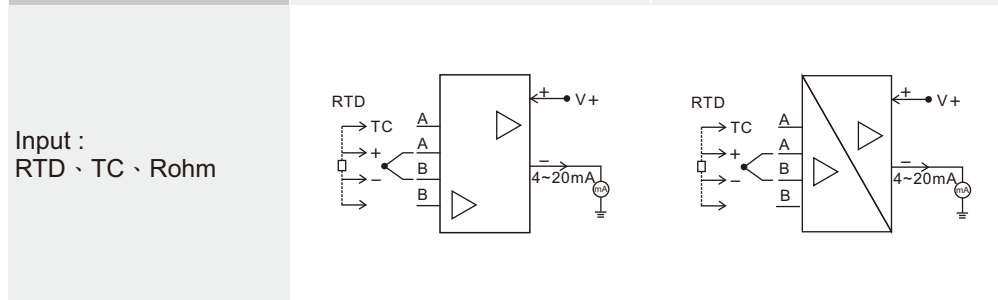
Temperature Transmitter



SPECIFICATION



TYPE	TR210 Series	TR220 Series
	Non-Isolation	Isolation



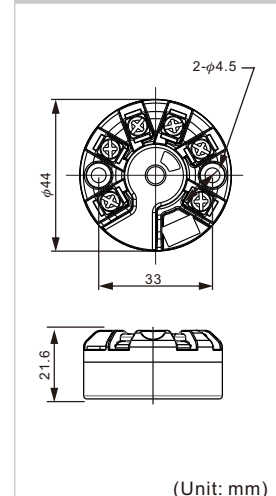
Function summary

Features:		
Power supply(Vdc)	12~36 Vdc (Loop Power)	24 VDC ± 20%
Ambient temp. range(°C)	-40~85	-40~85
Isolation	N/A	1500 Vdc or peak ac
Channels	1	1
CJC Accuracy(°C)	± 1	± 1
Input:		
PT100 Span /min. span(°C)	-200~850 / 10	-200~850 / 10
PT1000 Span /min. Span(°C)	-200~850 / 10	-200~850 / 10
Rohm Span /min. Span(Ω)	0~400 or 0~4000 / 10	0~400 or 0~4000 / 10
TC types	B, E, J, K, N, R, S, T	B, E, J, K, N, R, S, T
Output:		
Loop power 2-wire output	4~20mA or 20~4mA	4~20mA or 20~4mA

Technical summary

	Basic Accuracy	Temperature Coefficient
PT100-2Wiers/PT1000-2Wiers	± 1°C	± 0.005% / °C
PT100-3Wiers/PT1000-3Wiers	± 0.5°C	± 0.005% / °C
PT100-4Wiers/PT1000-4Wiers	± 0.5°C	± 0.005% / °C
TC type: E, J, K, N, R, S	± 1.5°C	± 0.01% / °C
TC type: B	± 2°C	± 0.04% / °C
TC type: T	± 1°C	± 0.01% / °C
Rohm	± 0.1Ω	± 0.005% / °C

Dimensions



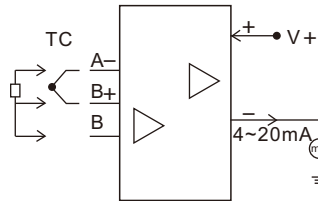


TYPE

TR160 Series

Economical type

Input : RTD, TC,
Rohm, mV,
Linear Current,
Linear Voltage



Function summary

Features:

Power supply(Vdc)	18~36V
Ambient temp. range(°C)	-40~85
Isolation	None
Channels	1
CJC accuracy(°C)	$\leq \pm 1$

Input:

PT100 Span /min. span(°C)	-200~850 / 10
Rohm Span /min. Span(Ω)	0~400 / 5
TC types	B, E, J, K, N, R, S, T
Linear Current, signal range	0~20mA, 4~20mA
Linear Voltage, signal range	0~0.5V, 0~1V, 0~5V, 0~10V, 0~20V

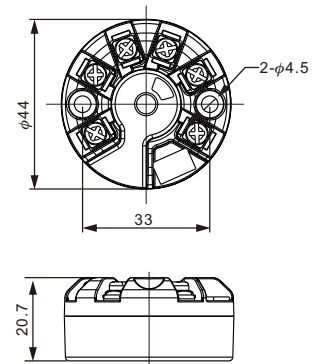
Output:

Loop Power 2-wire output	4~20mA/20~4mA
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Technical summary

	Basic Accuracy	Temperature Coefficient
PT100	$\leq \pm 0.5^{\circ}\text{C}$	$\leq \pm 0.005^{\circ}\text{C}$
Rohm	$\leq \pm 0.4\Omega$	$\leq \pm 0.005^{\circ}\text{C}$
TC type: E, J, K, N, T	$\leq \pm 4^{\circ}\text{C}$	$\leq \pm 0.04^{\circ}\text{C}$
TC type: B	$\leq \pm 3^{\circ}\text{C}$	$\leq \pm 0.01^{\circ}\text{C}$
TC type: R, S	$\leq \pm 3^{\circ}\text{C}$	$\leq \pm 0.04^{\circ}\text{C}$
TC type: T	$\leq \pm 2^{\circ}\text{C}$	$\leq \pm 0.01^{\circ}\text{C}$
Voltage	$\leq \pm 0.1\text{mV}$	$\leq \pm 0.005^{\circ}\text{C}$

Dimensions



(Unit: mm)



TYPE	TR130/131 Series	TR140/141 Series
	DIN Rail Non-Isolation	DIN Rail Isolation
Input : RTD 、 TC 、 Rohm 、 mV 、 Linear Current 、 Linear Voltage	1 Channel 	1 Channel
	2 Channel 	2 Channel

Dimensions	
TR130/131/140/141 Series	
(Unit: mm)	

Function sSummary:		
Features:		
Power supply(Vdc)	18~32V(Loop-Powered)	18~32V(Loop-Powered)
Ambient temp. range(°C)	-20~60	-20~60
Isolation	None	1500 Vdc or peak ac
Channels	1 or 2	1 or 2
C/JC Accuracy(°C)	≤± 1(Internal)	≤± 1(Internal)
Input:		
PT100 Span /min. span(°C)	-200~850 / 10	-200~850 / 10
Rohm Span /min. Span(Ω)	0~400 / 5	0~400 / 5
TC types	B, E, J, K, N, R, S, T	B, E, J, K, N, R, S, T
Linear Current, signal range	0~20mA, 4~20mA	0~20mA, 4~20mA
Linear Voltage, signal range	0~0.5V, 0~1V, 0~5V, 0~10V, 0~20V	0~0.5V, 0~1V, 0~5V, 0~10V, 0~20V
Output:		
2-wire output	4~20mA	4~20mA
Technical summary:		
	Basic Accuracy	Temperature Coefficient
PT100	≤± 0.5°C	≤± 0.005% / °C
Rohm	≤± 0.04Ω	≤± 0.005% / °C
TC type: E, J, K, N, T	≤± 2°C	≤± 0.01% / °C
TC type: B	≤± 5.5°C	≤± 0.04% / °C
TC type: R, S	≤± 3°C	≤± 0.04% / °C
Voltage	≤± 0.01mV	≤± 0.005% / °C

MODEL NUMBER / ORDER CODE COMPARISON TABLE

Model Number	Order Code
TR210	TRX30100-A
TR220	TRX30100-B
TR160	TRX20100-A
TR130	TRX10000-A
TR131	TRX10200-A
TR140	TRX10000-B
TR141	TRX10200-B

ORDER INFORMATION

TRX 3 0 1 0 0 - ⁰⁹ ¹⁰ ¹¹ ¹² ¹³ ¹⁴ ¹⁵

09 Isolation type

- A: None Isolation
- B: Isolation

10 Input type

- C: T/C
- D: RTD
- T: RTD & T/C

11 12 Input range

C	00: ALL
	10: K Type -200°C~1370°C
	11: K Type -90°C~320°C
	20: J Type -210°C~1200°C
	21: J Type -90°C~320°C
	30: T Type -200°C~400°C
	40: E Type -200°C~1000°C
	50: R Type -50°C~1760°C
	60: S Type -50°C~1760°C
	80: N Type -200°C~1300°C

D	A0: RTD PT100 2/4 Wire
	A1: RTD PT100 3 Wire
	B0: RTD PT1000 2/4 Wire
	B1: RTD PT1000 3Wire

T	01: All Type & PT100 2/4 Wire
	02: All Type & PT1000 2/4 Wire
	03: All Type & PT100 3 Wire
	04: All Type & PT1000 3 Wire

13 14 Analog output

- 04: 4~20mA
- 05: 20~4mA

15 Display unit

- A: °C
- B: °F



④ Version

- 1: First
- 2: Second

⑤ ⑥ Appearance type

- 00: Din rail type(1 CH)
- 01: Circle type
- 02: Din rail type(2 CH)

⑨ Isolation type

- A: None Isolation
- B: Isolation

⑩ ⑪ Input range

- | | | |
|------------|--------------------------|--------------------------|
| V1: 0~0.5V | T1: ALL | T6: R Type -50°C~1760°C |
| V2: 0~1V | T2: K Type -200°C~1370°C | T7: S Type -50°C~1760°C |
| V3: 0~5V | TK: K Type -90°C~320°C | T8: B Type -250°C~1820°C |
| V4: 0~10V | T3: J Type -210°C~1200°C | T9: N Type -200°C~1300°C |
| V5: 0~20V | TJ: J Type -90°C~320°C | TA: PT 100 -200°C~850°C |
| I1: 4~20mA | T4: T Type -200°C~400°C | R1: 0~400 Ω |
| I2: 0~20mA | T5: E Type -200°C~1000°C | |

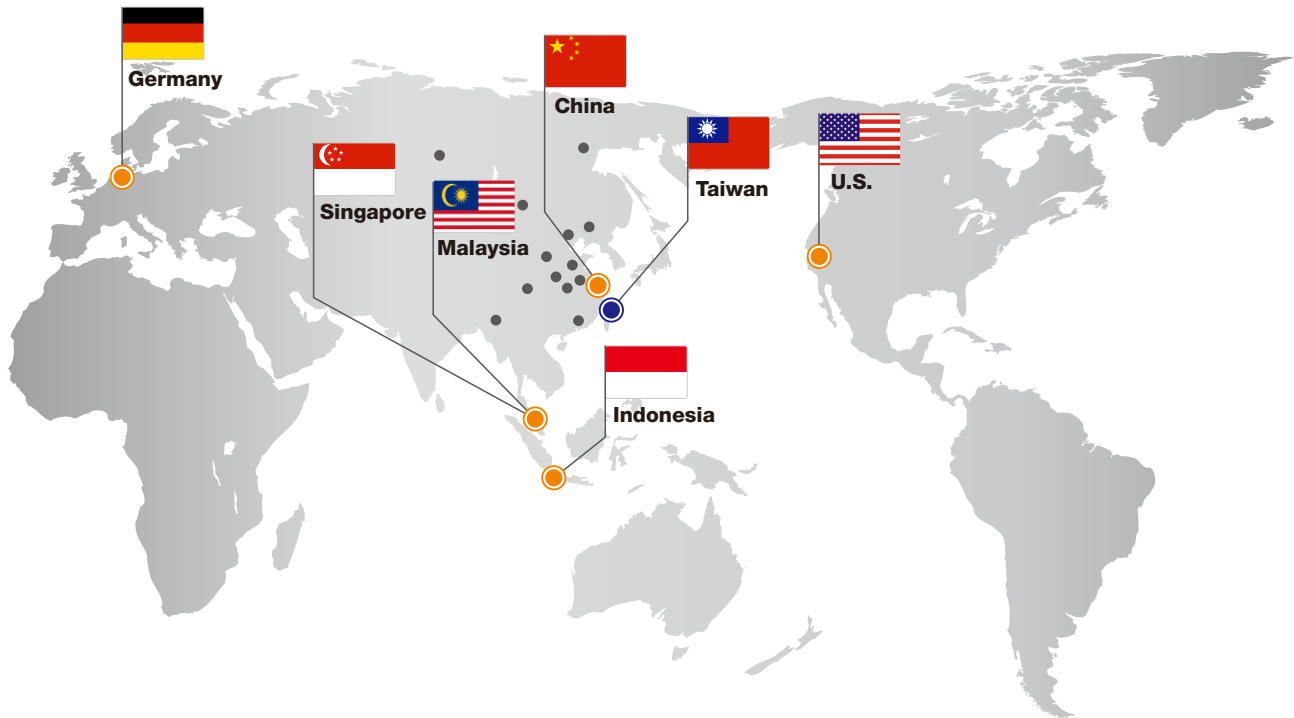
⑫ Analog output

- 1: 4~20mA
- 2: 20~4mA

⑬ Display unit

- A: °C
- B: °F

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