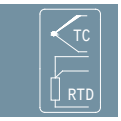
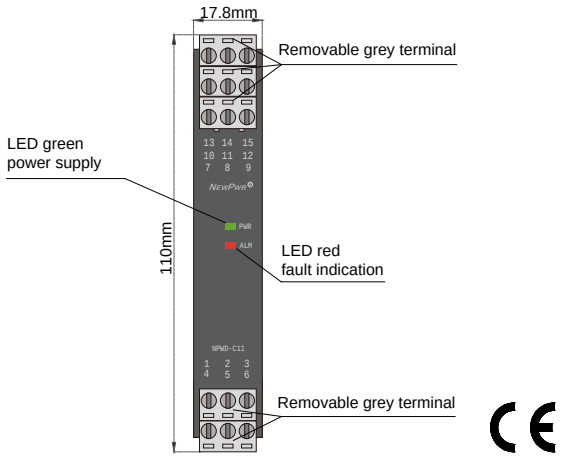


NPWD-C1
Single input, single output

NPWD-C11
Single input, dual output

Input: TC, RTD
Output: 4 ~ 20 mA

This temperature transmitter converts the thermocouple or thermal resistance signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



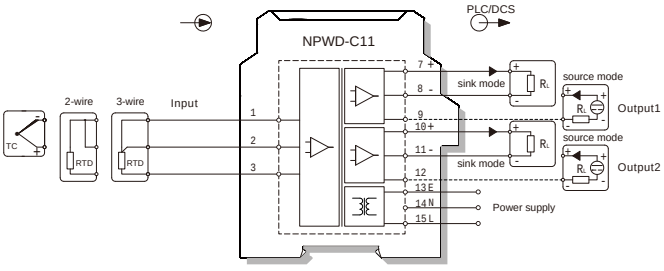
Parameters

Power supply:	85 V AC ~ 265 V AC (90 V DC ~ 360 V DC)
Power dissipation:	≤ 0.8 W (220 V AC, single output full-load)
	≤ 2.5 W (220 V AC, double output full-load)
Input signal:	K, E, S, B, J, T, R, N, etc
	Pt100, Cu100, Cu50, BA1, BA2, etc
Line resistance:	≤ 20 Ω per line (RTD)
Output signal:	4 ~ 20mA (sink/source)
Load resistance:	source: R_L ≤ 550Ω sink: R_L < [(U-3)/0.02]Ω;
	U: Loop power supply
Compensation accuracy:	1 °C (Temperature compensation range:
	-20 °C ~ +60 °C)
Temperature drift:	30 ppm/°C
Response time:	≤ 500 ms
Electromagnetic compatibility:	IEC 61326-3-1
Dielectric strength:	≥ 1500 V AC (Input/Output/Power supply)
Insulation resistance:	≥ 100 MΩ (Input/Output/Power supply)
Operation temperature:	-20 °C ~ +60 °C
Storage temperature:	-40 °C ~ +80 °C
Dimension:	17.8 mm (W) × 110 mm (H) × 117 mm (D)
Output states:	Whatever input fault status (except breakage), the output follows the input within measuring range. And the maximum value would not exceed the 110% of the upper limit of the measuring range (e.g. When the output signal type is 0 ~ 20 mA, the minimum output value may be 0 mA, the maximum output value would not exceed 22 mA)

Range and Conversion accuracy list

Type	Range	Min.span/Accuracy	
K	-200°C ~ +1372°C	< 300°C, ±0.3°C	≥ 300°C, ±0.1% F.S.
E	-100°C ~ +1000°C	< 300°C, ±0.3°C	≥ 300°C, ±0.1% F.S.
J	-100°C ~ +1200°C	< 300°C, ±0.3°C	≥ 300°C, ±0.1% F.S.
N	-200°C ~ +1300°C	< 300°C, ±0.3°C	≥ 300°C, ±0.1% F.S.
S	-50°C ~ +1768°C	< 500°C, ±0.5°C	≥ 500°C, ±0.1% F.S.
R	-50°C ~ +1768°C	< 500°C, ±0.5°C	≥ 500°C, ±0.1% F.S.
T	-20°C ~ +400°C	< 300°C, ±0.3°C	≥ 300°C, ±0.1% F.S.
B	+400°C ~ +1820°C	< 500°C, ±0.5°C	≥ 500°C, ±0.1% F.S.
PT100	-200°C ~ +850°C	< 100°C, ±0.1°C	≥ 100°C, ±0.1% F.S.
Cu50	-50°C ~ +150°C	< 100°C, ±0.1°C	≥ 100°C, ±0.1% F.S.
Cu100	-50°C ~ +150°C	< 100°C, ±0.1°C	≥ 100°C, ±0.1% F.S.

Wiring diagram



Model rules

NPWD-C☒☒

The second output signal[note1]
Default: null

The first output signal[note1]

note1 : output signal

Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA