

Temperature Transmitter



NPWD-C1L

Single input, single output

Input: TC, RTD
Output: 4 ~ 20 mA

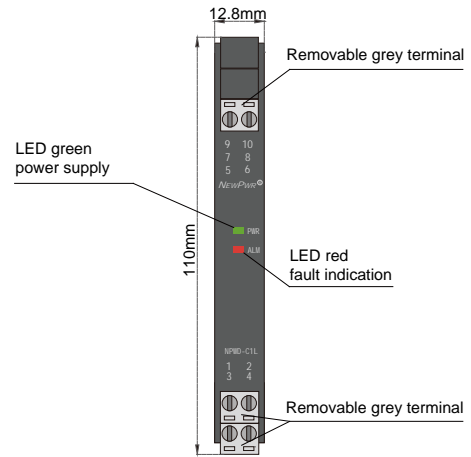
This temperature transmitter converts the thermocouple or thermal resistance signals to current signals. It has external cold junction compensation terminals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Modify parameters by using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

Parameters

Loop Powered:	12 V DC ~ 30 V DC (Reverse power protection)
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 ~ 20 mA
Load resistance:	$R_L < [(U-12)/0.02]\Omega$; U is loop powered voltage
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)
Insulation resistance:	≥ 100 MΩ (Input/Output)
Operation temperature:	-20 °C ~ +60 °C
Storage temperature:	-40 °C ~ +80 °C
Dimension:	12.8 mm (W) × 110 mm (H) × 117 mm (D)
Output states:	Whatever input fault status (except breakage, the output is 3.5 mA), the output follows the input within measuring range. And the maximum value would not exceed 22 mA, the maximum output value would not less than 3.5 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

