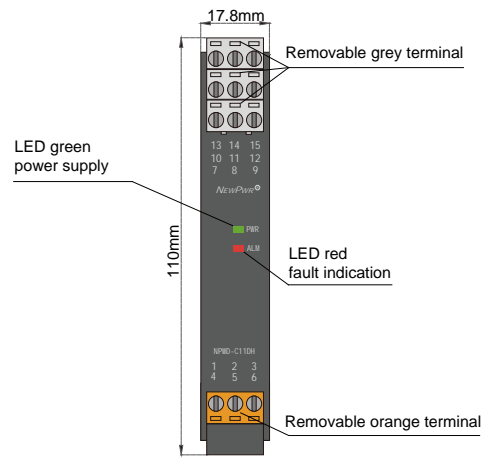




**NPWD-C1DH** Single input, single output  
**NPWD-C11DH** Single input, dual output  
 Input: TC, RTD  
 Output: 4 ~ 20 mA

This temperature transmitter converts the thermocouple or thermal resistance signals to current signals. It 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.



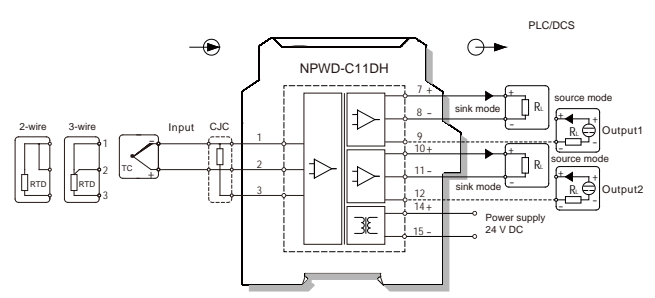
## Parameters

- Power supply: 18 V DC ~ 60 V DC (Reverse power protection)
- Power dissipation: 0.8 W (single output), 1.2 W (double output)
- Input signal: K, E, S, B, J, T, R, N, etc  
Pt100, Cu100, Cu50, BA1, BA2, etc
- Line resistance:  $\leq 20 \Omega$  per line (RTD)
- Output signal: 4 ~ 20mA (sink/source)
- Load resistance: source:  $R_L \leq 550 \Omega$  sink:  $R_L < [(U-3)/0.02] \Omega$   
U: Loop power supply
- Compensation accuracy: 1 °C (Temperature compensation range: -20 °C ~ +60 °C)
- Temperature drift: 30 ppm/°C
- Response time:  $\leq 500$  ms
- Electromagnetic compatibility: IEC 61326-3-1
- Dielectric strength:  $\geq 1500$  V AC (Input/Output/Power supply)
- Insulation resistance:  $\geq 100$  M $\Omega$  (Input/Output/Power supply)
- Operation temperature: -20 °C ~ +60 °C
- Storage temperature: -40 °C ~ +80 °C
- Dimension: 17.8 mm (W) x 110 mm (H) x 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, $\pm 0.3^\circ\text{C}$	$\geq 300^\circ\text{C}$ , $\pm 0.1\%$ F.S.
E	-100°C ~ +1000°C	< 300°C, $\pm 0.3^\circ\text{C}$	$\geq 300^\circ\text{C}$ , $\pm 0.1\%$ F.S.
J	-100°C ~ +1200°C	< 300°C, $\pm 0.3^\circ\text{C}$	$\geq 300^\circ\text{C}$ , $\pm 0.1\%$ F.S.
N	-200°C ~ +1300°C	< 300°C, $\pm 0.3^\circ\text{C}$	$\geq 300^\circ\text{C}$ , $\pm 0.1\%$ F.S.
S	-50°C ~ +1768°C	< 500°C, $\pm 0.5^\circ\text{C}$	$\geq 500^\circ\text{C}$ , $\pm 0.1\%$ F.S.
R	-50°C ~ +1768°C	< 500°C, $\pm 0.5^\circ\text{C}$	$\geq 500^\circ\text{C}$ , $\pm 0.1\%$ F.S.
T	-20°C ~ +400°C	< 300°C, $\pm 0.3^\circ\text{C}$	$\geq 300^\circ\text{C}$ , $\pm 0.1\%$ F.S.
B	+400°C ~ +1820°C	< 500°C, $\pm 0.5^\circ\text{C}$	$\geq 500^\circ\text{C}$ , $\pm 0.1\%$ F.S.
PT100	-200°C ~ +850°C	< 100°C, $\pm 0.1^\circ\text{C}$	$\geq 100^\circ\text{C}$ , $\pm 0.1\%$ F.S.
Cu50	-50°C ~ +150°C	< 100°C, $\pm 0.1^\circ\text{C}$	$\geq 100^\circ\text{C}$ , $\pm 0.1\%$ F.S.
Cu100	-50°C ~ +150°C	< 100°C, $\pm 0.1^\circ\text{C}$	$\geq 100^\circ\text{C}$ , $\pm 0.1\%$ F.S.

## Wiring diagram



## Model rules

NPWD-C   DH   
 PB: BUS powered  
 Default: Terminals powered  
 The second output signal<sup>note1</sup>  
 Default: null  
 The first output signal<sup>note1</sup>

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