NEWPWR
优 倍 电 气

Isolator, Temperature transmitter

Product Catalogue & Technical Brochure (2021)

www.anpe.cn

Catalogue

C series isolator

RTD, TC

TC

Millivolt

RTD

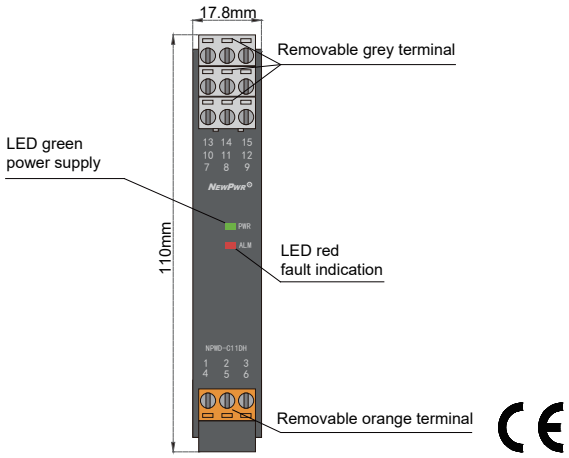
Catalogue

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.



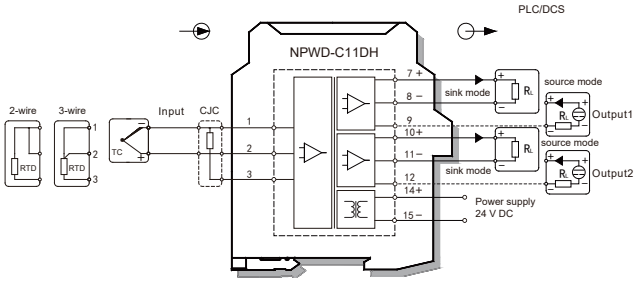
Parameters

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:	≤ 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



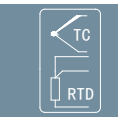
Model rules

NPWD-C☒☒DH☒

- PB: BUS powered
  Default: Terminals powered
- 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

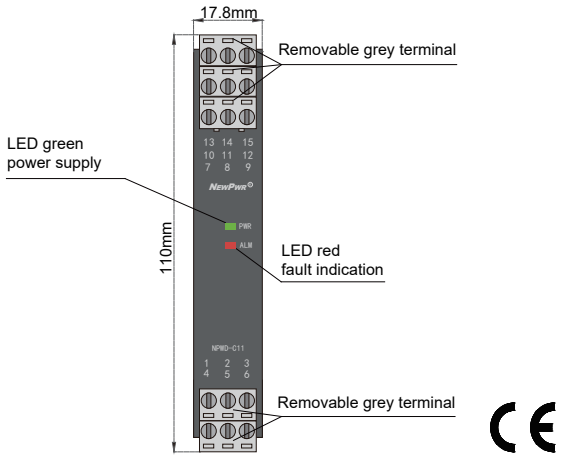


NPWD-C1
Single input, single output

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.



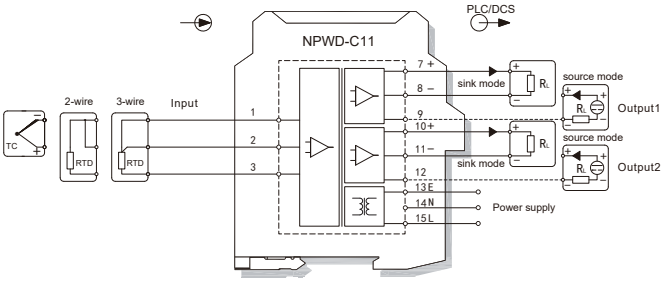
Parameters

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

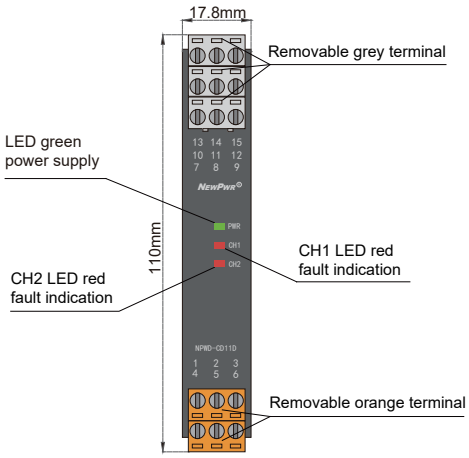
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPWD-CD11D

Dual 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.



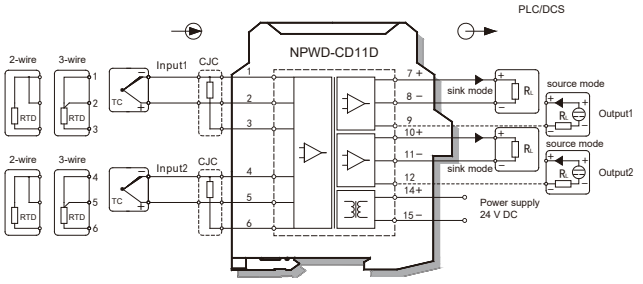
Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	1.2 W
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-CD☒☒D☒

- PB: BUS powered
- Default: Terminals powered
- The second output signal[note1]
- The first output signal[note1]

note1: output signal

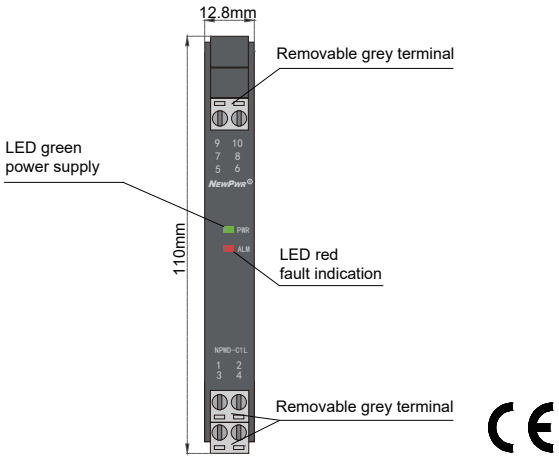
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

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.



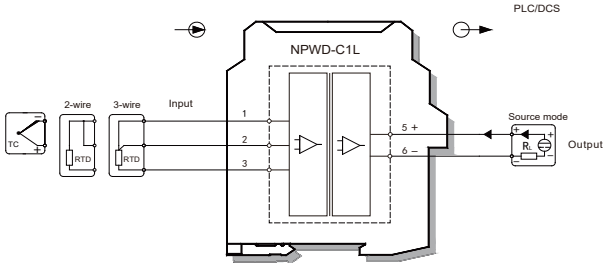
Parameters

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]Ω; 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

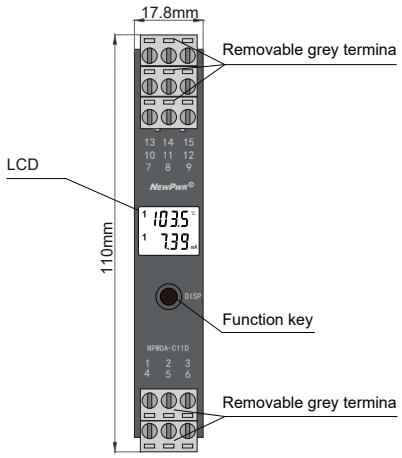


NPWDA-C1D Single input, single output

NPWDA-C11D 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. Its stability and reliability are ensured by the applied techniques of digital adjustment, zero and full scale potentiometer exemption, automatic dynamic zero adjustment. Modify parameters by using PC or a handheld programmer.



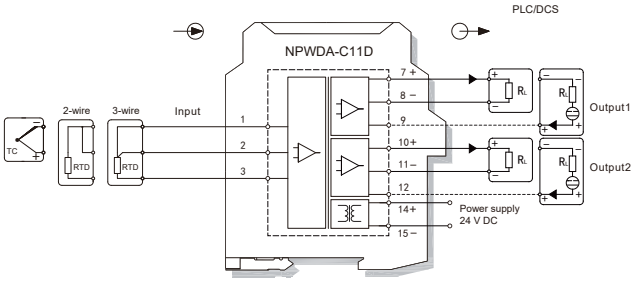
Parameters

Power supply:	18 V DC ~ 32 V DC
Power dissipation:	0.5 W (single output)
	0.7 W (double output)
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 ≤ 350Ω 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:	50 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

NPWDA-C☒☒D

- The second output signal[note1] Default: null
- The first output signal[note1]

note1: output signal

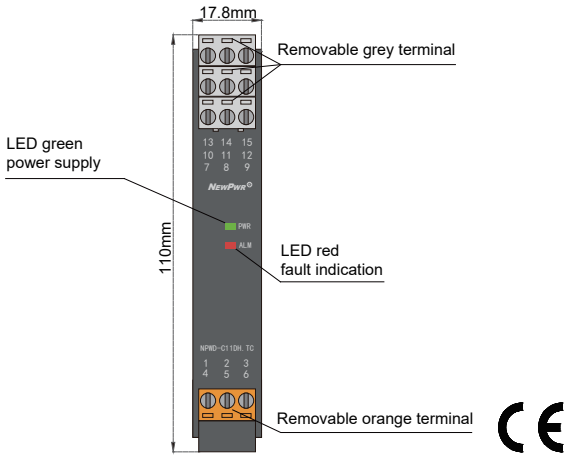
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPWD-C1DH.TC
Single input, single output

NPWD-C11DH.TC
Single input, dual output

Input: TC
Output: 4 ~ 20 mA

This temperature transmitter converts the thermocouple 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.



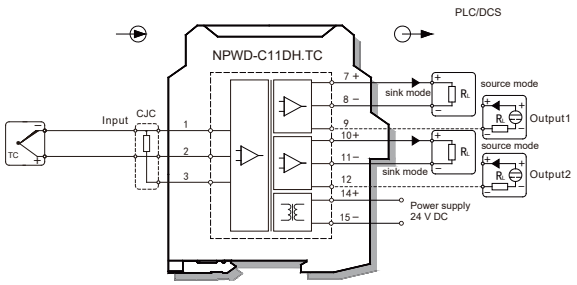
Parameters

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
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.

Wiring diagram



Model rules

NPWD-C☒☒DH☒.TC

- ☒ (last): PB: BUS powered; Default: Terminals powered
- ☒ (middle): The second output signal[note1]; Default: null
- ☒ (first): The first output signal[note1]

note1: output signal

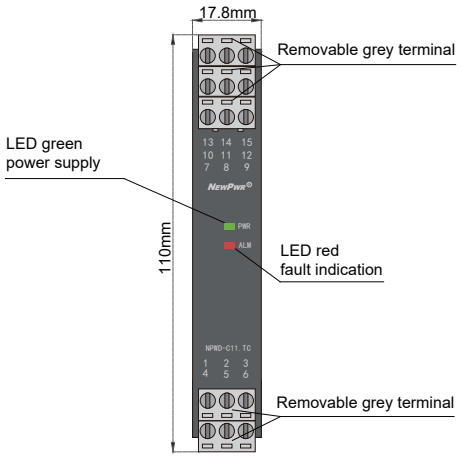
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPWD-C1.TC Single input, single output

NPWD-C11.TC Single input, dual output

Input: TC
Output: 4 ~ 20 mA

This temperature transmitter converts the thermocouple 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.



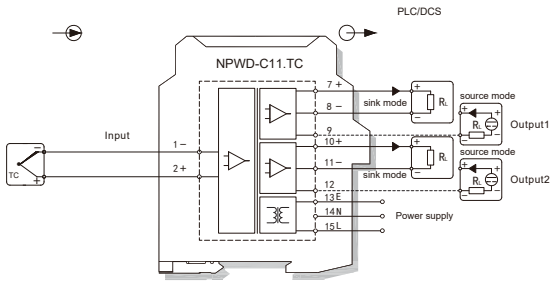
Parameters

Power supply:	85 V AC ~ 265 V AC (90 V DC ~ 360 V DC)
Power dissipation:	≤ 0.8 W (220V AC, single output full-load)
	≤ 2.5 W (220V AC, double output full-load)
Input signal:	K, E, S, B, J, T, R, N, 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.

Wiring diagram



Model rules

NPWD-C☒☒.TC

- The second output signal[note1] Default: null
- The first output signal[note1]

note1: output signal

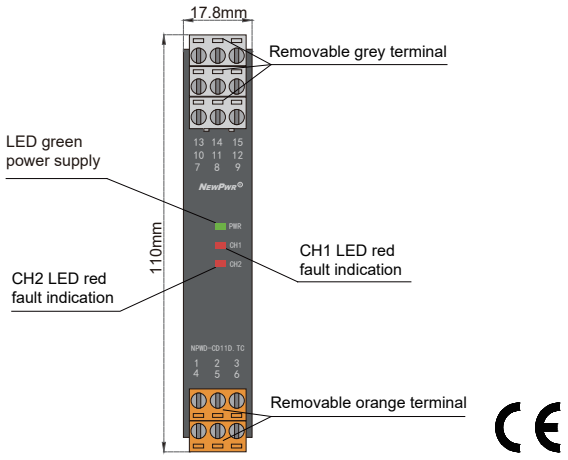
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPWD-CD11D.TC

Dual input, dual output

Input: TC
Output: 4 ~ 20 mA

This temperature transmitter converts the thermocouple 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.



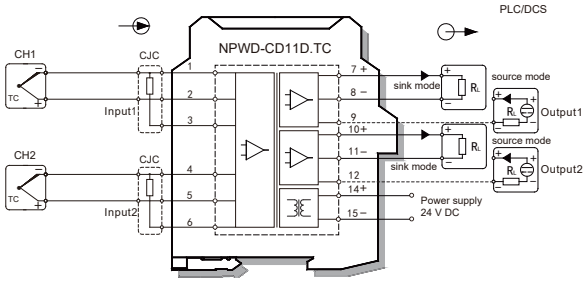
Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	1.2 W
Input signal:	K, E, S, B, J, T, R, N, etc
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.

Wiring diagram



Model rules

NPWD-CD☒☒☒.TC

- PB: BUS powered
- Default: Terminals powered
- The second output signal[note1]
- The first output signal[note1]

note1: output signal

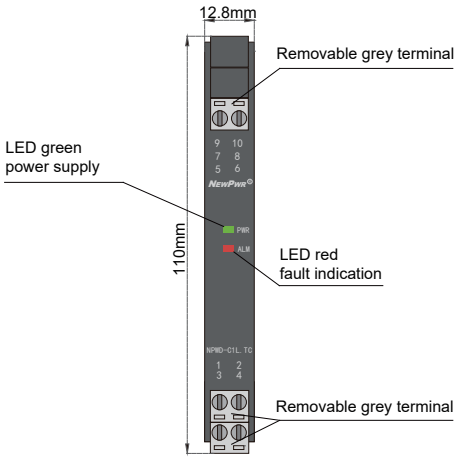
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPWD-C1L.TC

Single input, single output

Input: TC
Output: 4 ~ 20 mA

This temperature transmitter converts the thermocouple signals to current signals. It can work without an independent power supply. The input, output are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



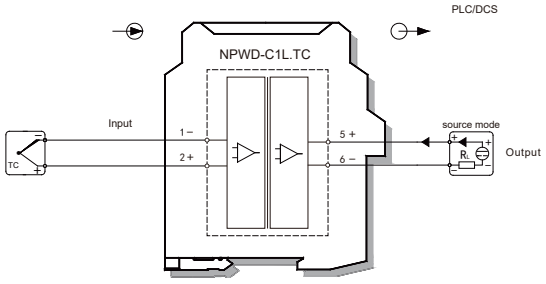
Parameters

Power supply:	12 V DC ~ 30 V DC (Reverse power protection)
Input signal:	K, E, S, B, J, T, R, N, etc
Output signal:	4 ~ 20 mA
Load resistance:	R_L < [(U-12)/0.02]Ω; 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:	
Insulation resistance:	≥ 1500 V AC (Input/Output)
Operation temperature:	≥ 100 MΩ (Input/Output)
Storage temperature:	-20 °C ~ +60 °C
Dimension:	-40 °C ~ +80 °C
Output states:	12.8 mm (W) × 110 mm (H) × 117 mm (D) 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.

Wiring diagram

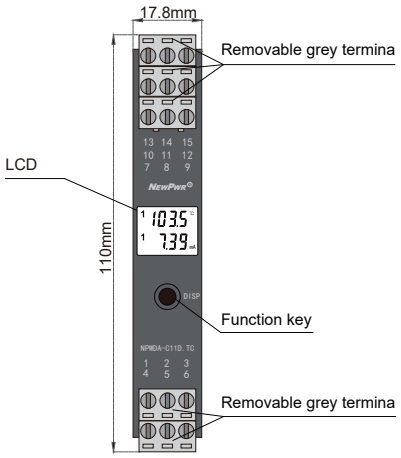


NPWDA-C1D.TC
Single input, single output

NPWDA-C11D.TC
Single input, dual output

Input: TC
Output: 4 ~ 20 mA

This temperature transmitter converts the thermocouple signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Its stability and reliability are ensured by the applied techniques of digital adjustment, zero and full scale potentiometer exemption, automatic dynamic zero adjustment. Modify parameters by using PC or a handheld programmer.



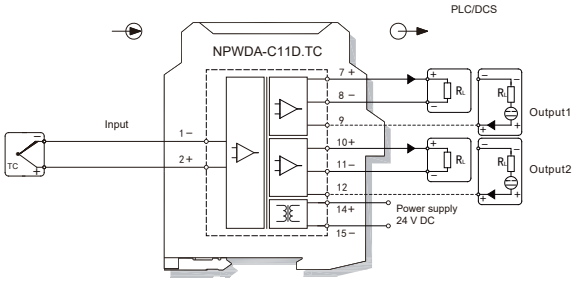
Parameters

Power supply:	18 V DC ~ 32 V DC
Power dissipation:	0.5 W (single output) 0.7 W (double output)
Input signal:	K, E, S, B, J, T, R, N, etc
Line resistance:	≤ 20 Ω per line (RTD)
Output signal:	4 ~ 20mA (sink/source)
Load resistance:	source: R_L ≤ 350Ω 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:	50 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.

Wiring diagram



Model rules

NPWDA-C☒☒D.TC

- The second output signal[note1]
  Default: null
- The first output signal[note1]

note1: output signal

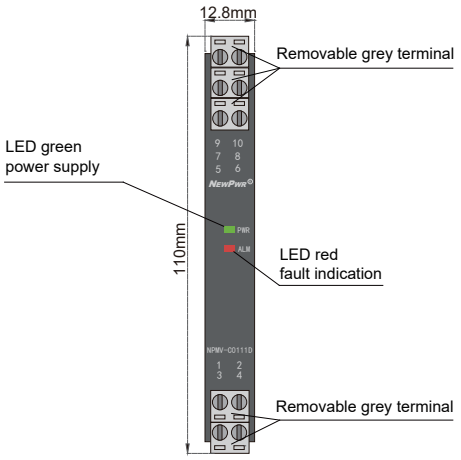
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPMV-C011D Single input, single output

NPMV-C0111D Single input, dual output

Input: Millivolt
Output: 4 ~ 20 mA

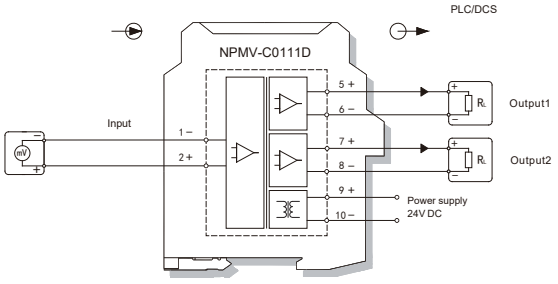
This millivolt transmitter converts the millivolt signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	0.8 W (single output) 1.2 W (double output)
Input signal:	0 ~ 20 mV
Output signal:	4 ~ 20 mA
Load resistance:	R_L ≤ 550 Ω
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:	12.8 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)

Wiring diagram



Model rules

NPMV-C0☒☒☒D☒

- PB: BUS powered
  Default: Terminals powered
- The second output signal[note1]
  Default: null
- The first output signal[note1]
- The input signal 1: 0 ~ 20 mV; 2: 0 ~ 50 mV
  1: 0 ~ 100 mV; 4: 0 ~ 200 mV

note1: output signal

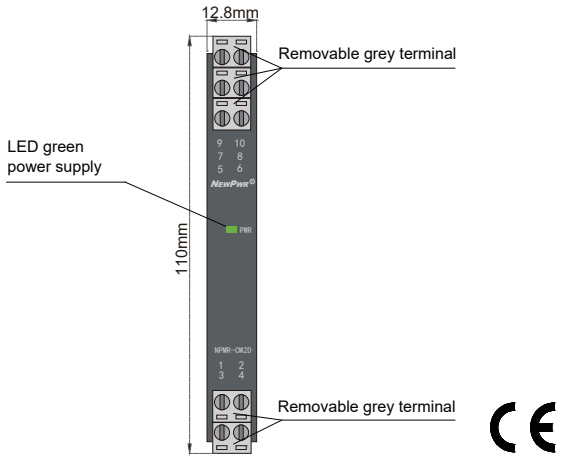
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPMR-CM1D Single input, single output

NPMR-CM2D Single input, dual output

Input: Millivolt
Output: 1:1 mV

This millivolt repeater converts the millivolt signals to 1:1 millivolt signals. It can work without an independent power supply. The input, output are galvanically isolated from each other. It has the function of setting over range output when the input is disconnected.



Parameters

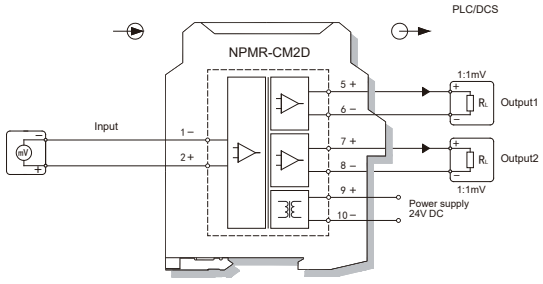
Power supply:	18V DC ~ 32V DC (Reverse power protection)
Power dissipation:	0.4W (single output)
	0.8W (double output))
Input signal:	-100mV ~ 100mV
Input resistance:	≥ 20MΩ
Output signal:	1:1 mV
Output resistance:	55Ω
Compensation accuracy:	0.05%F.S.
Temperature drift:	0.005%F.S./°C
Response time:	≤ 2ms
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:	12.8 mm (W) × 110 mm (H) × 117 mm (D)

DIP switch settings

S1 and S2 cannot be set to ON at the same time

DIP Switch		Output (Input is disconnected)
S1	S2	
ON	OFF	< -100mV
OFF	ON	> 100mV

Wiring diagram

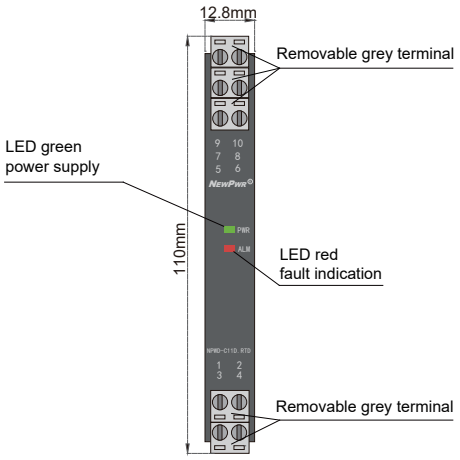


NPWD-C1D.RTD Single input, single output

NPWD-C11D.RTD Single input, dual output

Input: RTD
Output: 4 ~ 20 mA

This temperature transmitter converts the 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.



RTD

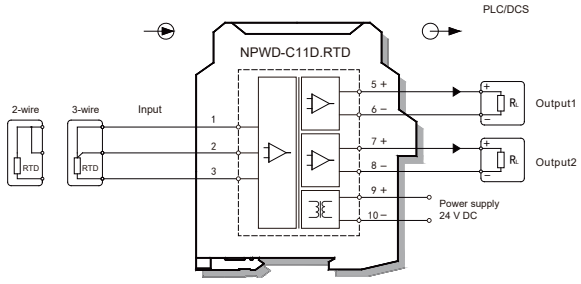
Parameters

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:	Pt100, Cu100, Cu50, BA1, BA2, etc
Line resistance:	≤ 20 Ω per line (RTD)
Output signal:	4 ~ 20 mA
Load resistance:	R_L ≤ 550 Ω
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:	12.8 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	
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☒☒D☒.RTD

- PB: BUS powered
  Default: Terminals powered
- The second output signal[note1]
  Default: null
- The first output signal[note1]

note1: output signal

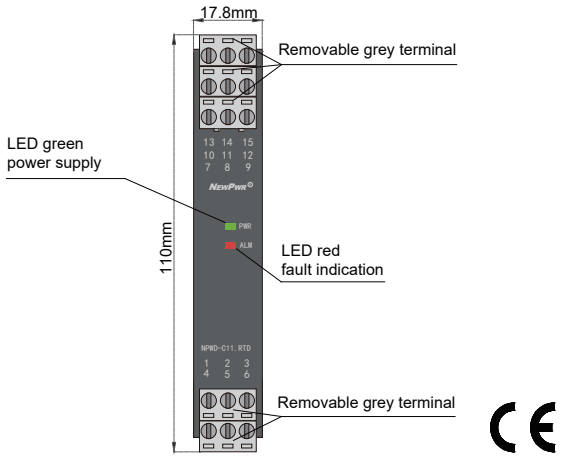
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPWD-C1.RTD Single input, single output

NPWD-C11.RTD Single input, dual output

Input: RTD
Output: 4 ~ 20 mA

This temperature transmitter converts the 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.



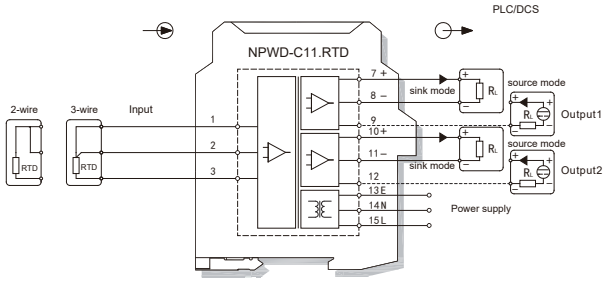
Parameters

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:	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
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	
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☒☒.RTD

- The second output signal[note1]
  - Default: null
- The first output signal[note1]

note1: output signal

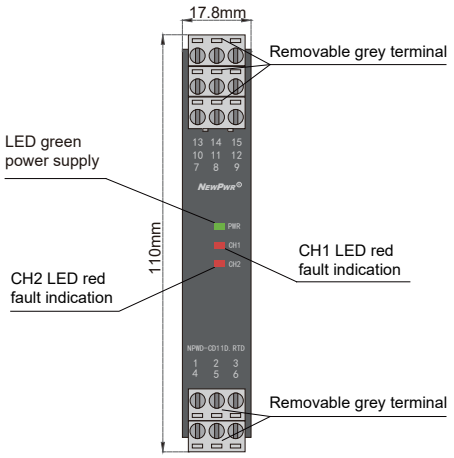
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPWD-CD11D.RTD

Dual input, dual output

Input: RTD
Output: 4 ~ 20 mA

This temperature transmitter converts the 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.



RTD

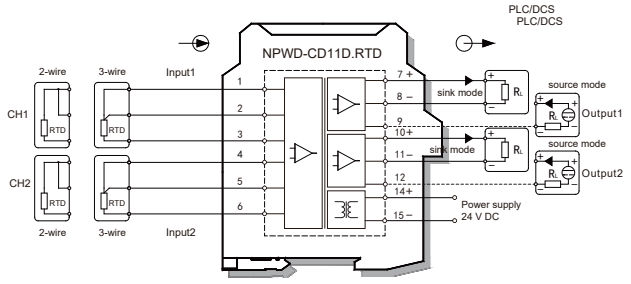
Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	1.2 W
Input signal:	Pt100, Cu100, Cu50, BA1, BA2, etc
Line resistance:	≤ 20 Ω per line (RTD)
Output signal:	4 ~ 20 mA (sink/source)
Load resistance:	source: R_L ≤ 550Ω sink: R_L < [(U-3)/0.02]Ω; U: Loop power supply
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	
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-CD☒☒D☒.RTD

PB: BUS powered
Default: Terminals powered

The second output signal[note1]

The first output signal[note1]

note1: output signal

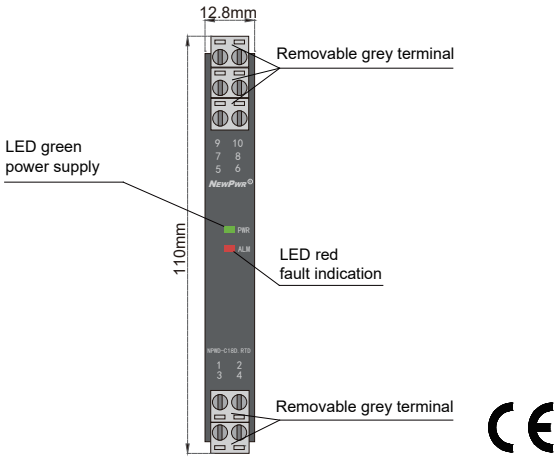
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPWD-C18D.RTD

Single input, dual output

Input: RTD
Output: 4 ~ 20 mA, RS485

This temperature transmitter converts the thermal resistance signals to current signals. It has RS485 interface. By using the MODBUS-RTU protocol, it can communicate with the other devices. 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.



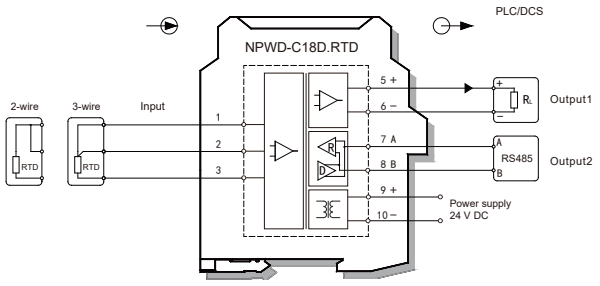
Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	0.9 W
Input signal:	Pt100, Cu100, Cu50, BA1, BA2, etc
Line resistance:	≤ 20 Ω per line (RTD)
Output signal:	Output1: 4 ~ 20 mA Output2: RS485
Load resistance:	R_L ≤ 550 Ω
Communication parameters:	MODBUS-RTU, distance ≤ 1000 m, notes number ≤ 32
Baud rate:	≤ 19.2 kbps
Temperature drift:	40 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:	12.8 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	
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☒8D☒.RTD

PB: BUS powered
Default: Terminals powered

The first output signal[note1]
Default: null

note1: output signal

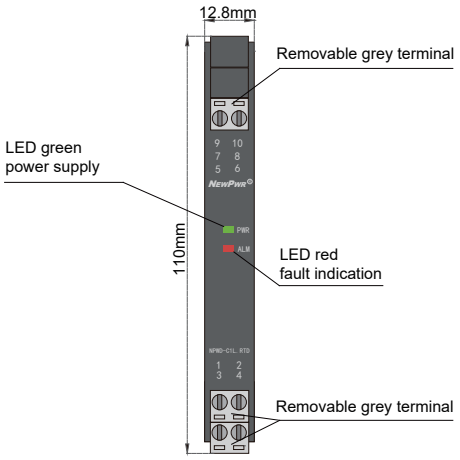
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPWD-C1L.RTD

Single input, single output

Input: RTD
Output: 4 ~ 20 mA, RS485

This temperature transmitter converts the thermal resistance signals to current signals. It can work without an independent power supply. The input, output are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



RTD

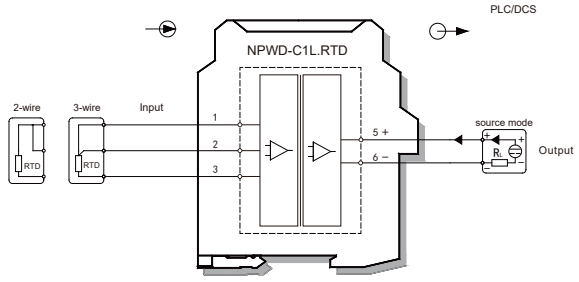
Parameters

Loop Powered:	12 V DC ~ 30 V DC Reverse power protection)
Input signal:	Pt100, Cu100, Cu50, BA1, BA2, etc
Line resistance:	≤ 20 Ω per line (RTD)
Output signal:	4 ~ 20mA
Load resistance:	R_L < [(U-12)/0.02]Ω; U is loop powered voltage
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	
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

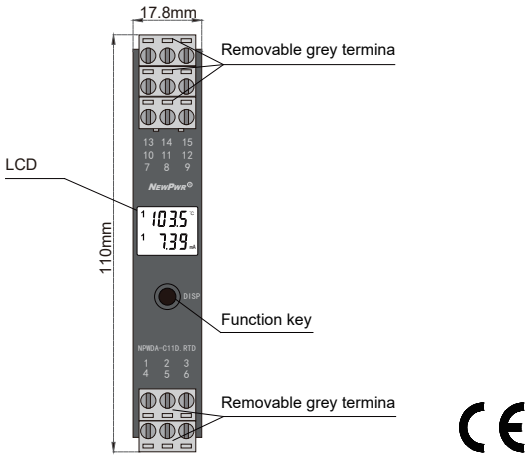


NPWDA-C1D.RTD
Single input, single output

NPWDA-C11D.RTD
Single input, dual output

Input: RTD
Output: 4 ~ 20 mA

This temperature transmitter converts the thermal resistance signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Its stability and reliability are ensured by the applied techniques of digital adjustment, zero and full scale potentiometer exemption, automatic dynamic zero adjustment. Modify parameters by using PC or a handheld programmer.



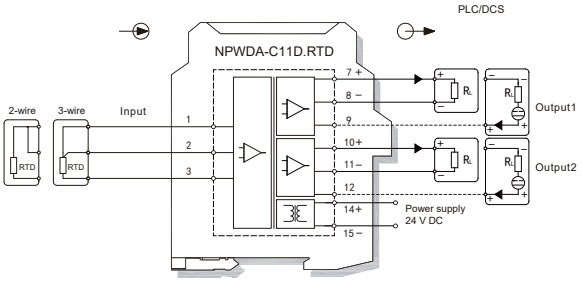
Parameters

Power supply:	18 V DC ~ 32 V DC
Power dissipation:	0.5 W (single output) 0.7 W (double output)
Input signal:	Pt100, Cu100, Cu50, BA1, BA2, etc
Line resistance:	≤ 20 Ω per line (RTD)
Output signal:	4 ~ 20mA (sink/source)
Load resistance:	source: R_L ≤ 350Ω sink: R_L < [(U-3)/0.02]Ω; U: Loop power supply
Temperature drift:	50 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	
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

NPWDA-C☒☒D.RTD

- The second output signal[note1]
  Default: null
- The first output signal[note1]

note1: output signal

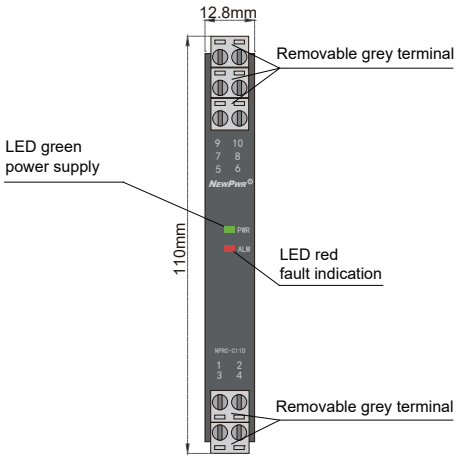
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPRC-C1D
Single input, single output

NPRC-C11D
Single input, dual output

Input: Resistance
Output: 4 ~ 20 mA

This resistance transmitter converts the 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.

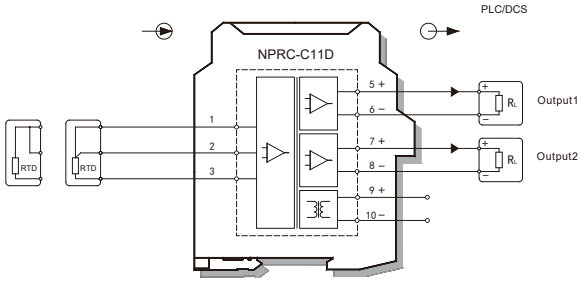


RTD

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:	18 Ω ~ 400 Ω
Output signal:	4 ~ 20 mA（sink/source）
Load resistance:	R_L ≤ 550 Ω
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:	12.8 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)

Wiring diagram



Model rules

NPRC-C☒☒D☒

- PB: BUS powered
  Default: Terminals powered
- The second output signal[note1]
  Default: null
- The first output signal[note1]

note1: output signal

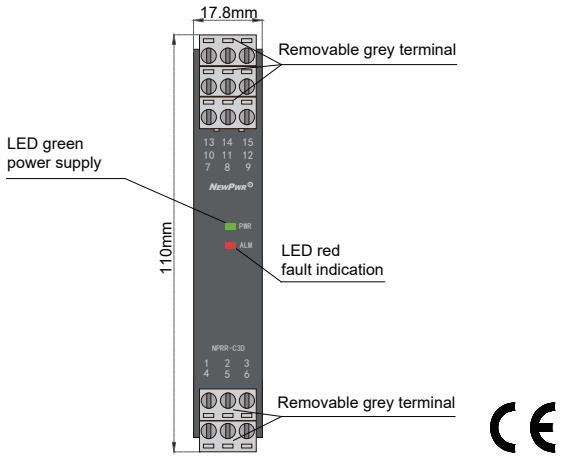
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPRR-C1D Single input, single output
NPRR-C2D Single input, dual output
NPRR-C3D Dual input, dual output

Input: Resistance; Output: 1:1 Resistance

This resistance repeater converts the resistance signals to 1:1 resistance signals. The input, output, and power supply are galvanically isolated from each other.

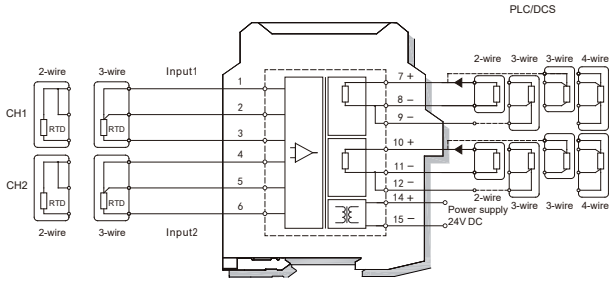
RTD



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	0.4 W
Input signal:	18 Ω ~ 400 Ω
Line resistance:	≤ 20 Ω per line (RTD)
Output signal:	1:1 resistance
Exciting current:	0.1 mA ~ 10 mA
Conversion accuracy:	excitation current Accuracy 0.5 mA ~ 10 mA ± 0.1%F.S. or < 0.2 Ω (select max)
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, breakage output about 16 Ω), the output follows the input within measuring range. the maximum output value would not exceed 430 Ω)

Wiring diagram

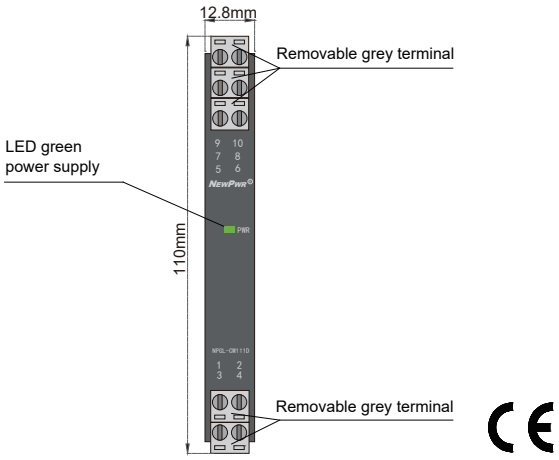


NPGL-CM11D
Single input, single output

NPGL-CM111D
Single input, dual output

Input: 4 ~ 20 mA
Output: 4 ~ 20 mA

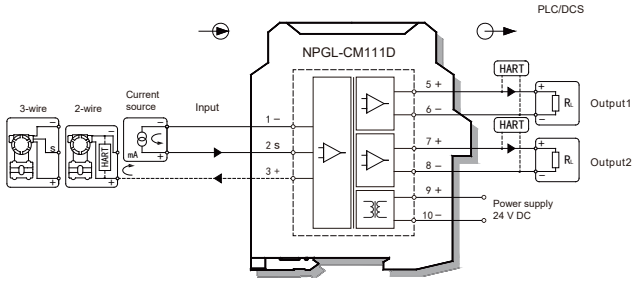
This isolator detects loop current and converts it into current signals, and also provides transmitters with power in the field area. It allows transmission of HART communication signals. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	1.3 W (24 V, single output)
	1.8 W (24 V, double output)
Input signal:	4 ~ 20 mA, HART
Input resistance:	approx. 50 Ω
Available voltage:	open-circuit voltage ≤ 26 V
	voltage: ≥ 22 V at 20 mA
Output signal:	4 ~ 20 mA, HART
Load resistance:	R_L ≤ 550 Ω
Accuracy:	0.1% F.S.
Temperature drift:	30 ppm/°C
Response time:	≤ 2 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:	12.8 mm (W) × 110 mm (H) × 117 mm (D)

Wiring diagram



Other ordering information

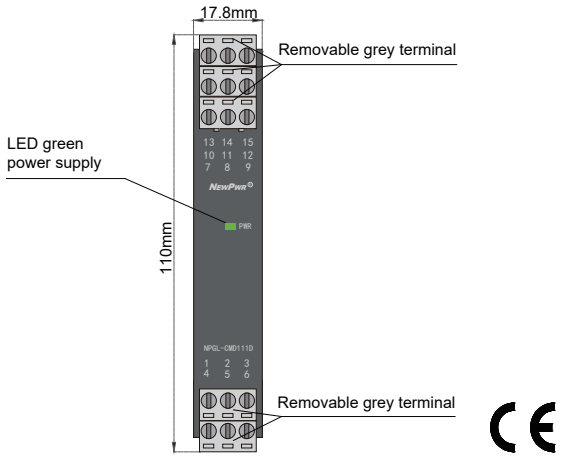
Type	Input	Output1	Output2	Power supply
NPGL-CM12D	4 ~ 20 mA	1 ~ 5 V	--------	Terminal
NPGL-CM45D	0 ~ 5 V	0 ~ 10 V	--------	Terminal
NPGL-CM54D	0 ~ 10 V	0 ~ 5 V	--------	Terminal
NPGL-CM55D	0 ~ 10 V	0 ~ 10 V	--------	Terminal
NPGL-CM112D	4 ~ 20 mA	4 ~ 20 mA	1 ~ 5 V	Terminal
NPGL-CM122D	4 ~ 20 mA	1 ~ 5 V	1 ~ 5 V	Terminal
NPGL-CM212D	1 ~ 5 V	4 ~ 20 mA	1 ~ 5 V	Terminal
NPGL-CM555D	0 ~ 10 V	0 ~ 10 V	0 ~ 10 V	Terminal

NPGL-CMD111D

Dual input, dual output

Input: 4 ~ 20 mA
Output: 4 ~ 20 mA

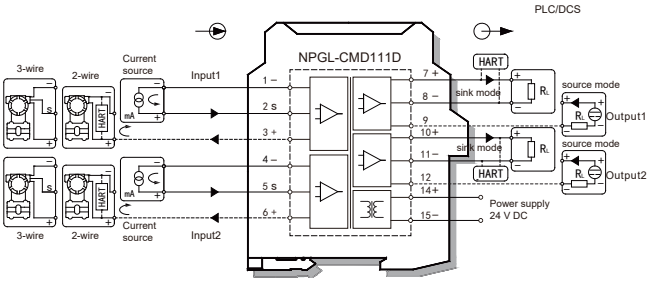
This isolator detects loop current and converts it into current signals, and also provides transmitters with power in the field area. It allows transmission of HART communication signals. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	2.5 W
Input signal:	4 ~ 20 mA, HART
Line resistance:	approx. 50 Ω
Available voltage:	open-circuit voltage ≤ 25 V voltage: ≥ 21 V at 20 mA
Output signal:	4 ~ 20mA (sink/source), HART
Load resistance:	source: R_L ≤ 550Ω sink: R_L < [(U-3)/0.02]Ω; U: Loop power supply
Compensation accuracy:	0.1%F.S.
Temperature drift:	30 ppm/°C
Response time:	≤ 2 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)

Wiring diagram



Other ordering information

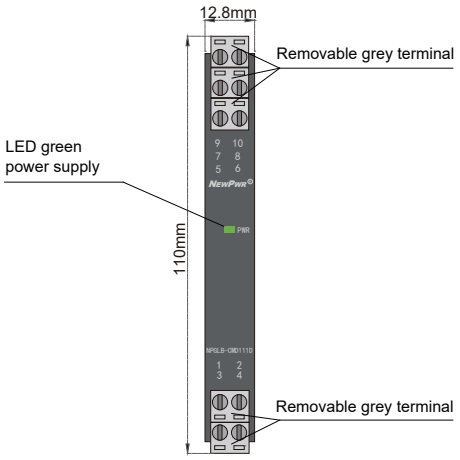
Type	Input	Output1	Output2	Power supply
NPGL-CMD122D	4 ~ 20 mA	1 ~ 5 V	1 ~ 5 V	Terminal
NPGL-CMD666D	0 ~ 20 mA	0 ~ 20 mA	0 ~ 20 mA	Terminal

NPGLB-CM11D
Single input, single output

NPGLB-CMD111D
Dual input, dual output

Input: 4 ~ 20 mA
Output: 4 ~ 20 mA

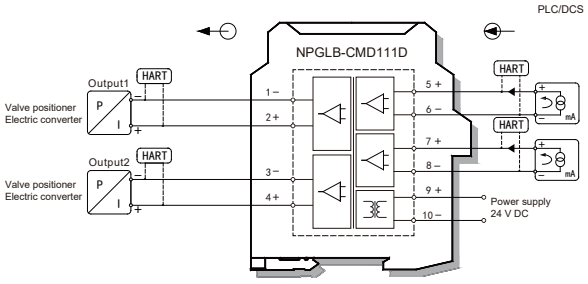
This isolator accepts 4 ~ 20 mA signal to drive executive mechanisms. It allows transmission of HART communication signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	1 W (24 V, single output full-load)
	2.2 W (24 V, double output full-load)
Input signal:	4 ~ 20 mA, HART
Output signal:	4 ~ 20 mA, HART
Load resistance:	R_L ≤ 800 Ω
Input voltage drop:	≤ 1.2 V
Accuracy:	0.1%F.S.
Temperature drift:	30 ppm/°C
Response time:	≤ 2 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:	12.8 mm (W) × 110 mm (H) × 117 mm (D)

Wiring diagram

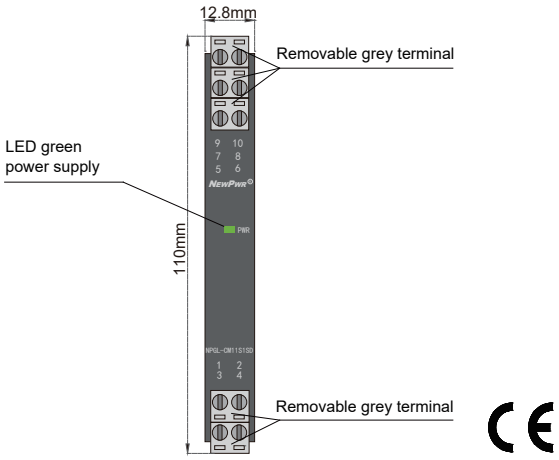


NPGL-CM11SD
Single input, single output

NPGL-CM1S1SD
Single input, dual output

Input: 4 ~ 20 mA
Output: 4 ~ 20 mA (sink mode)

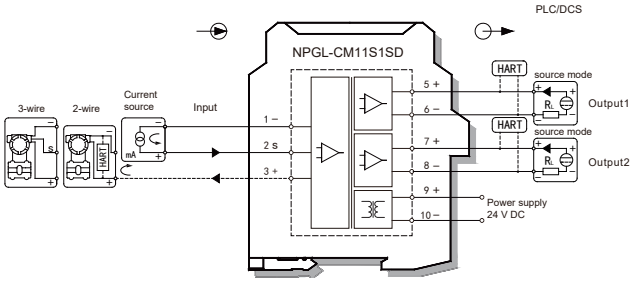
This isolator detects loop current and converts it into current (sink) signals. It allows transmission of HART communication signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	0.9 W (24 V, single output)
	1.0 W (24 V, double output)
Input signal:	4 ~ 20 mA, HART
Input resistance:	approx. 50 Ω
Available voltage:	open-circuit voltage ≤ 26 V
	voltage: ≥ 22 V at 20 mA
Output signal:	4 ~ 20 mA (Sink), HART
Load resistance:	R_L < [(U-3)/0.02]Ω; U: Loop power supply
Accuracy:	0.1%F.S.
Temperature drift:	30 ppm/°C
Response time:	≤ 2 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:	12.8 mm (W) × 110 mm (H) × 117 mm (D)

Wiring diagram

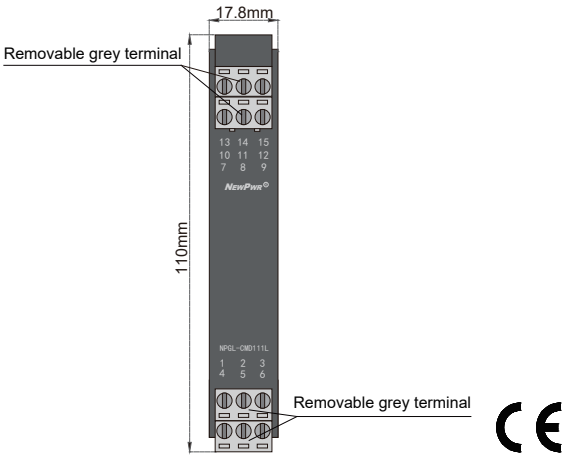


NPGL-CM11L
Single input, single output

NPGL-CMD111L
Single input, dual output

Input: 4 ~ 20 mA
Output: 4 ~ 20 mA (sink mode)

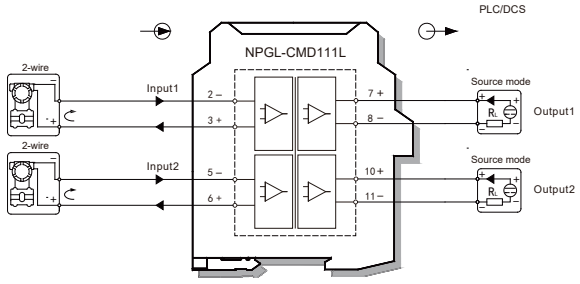
This isolator detects loop current and converts it into current signals. It can work without an independent power supply. The input, output are galvanically isolated from each other.



Parameters

Loop Powered:	18 V DC ~ 30 V DC (Reverse power protection)
Input signal:	4 ~ 20 mA
Available voltage:	(U-6-R_L ×0.02)V; U is loop powered voltage
Output signal:	4 ~ 20 mA
Accuracy:	0.4%F.S.
Temperature drift:	50ppm/°C
Response time:	≤ 2 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:	17.8 mm (W) × 110 mm (H) × 117 mm (D)

Wiring diagram

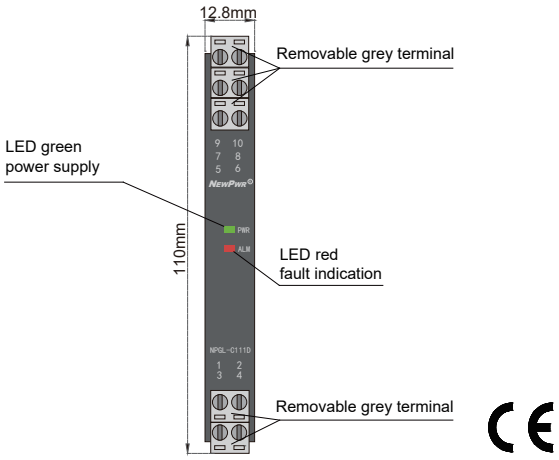


NPGL-C11D
Single input, single output

NPGL-C111D
Single input, dual output

Input: 4 ~ 20 mA
Output: 4 ~ 20 mA

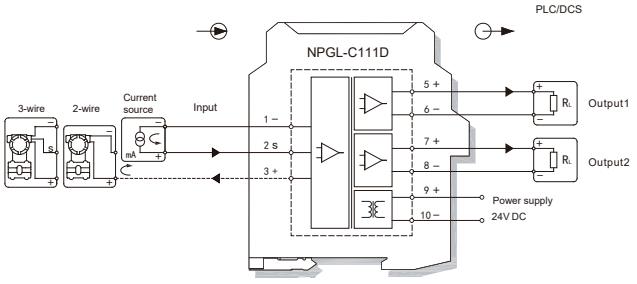
This isolator converts the current signals into current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	1.5 W (single output)
	2.0 W (double output)
Input signal:	4 ~ 20 mA
Input resistance:	≤ 60 Ω
Available voltage:	open-circuit voltage ≤ 26 V
	voltage: ≥ 22 V at 20 mA
Output signal:	4 ~ 20 mA
Load resistance:	R_L ≤ 500 Ω
Accuracy:	0.1%F.S.
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:	12.8 mm (W) × 110 mm (H) × 117 mm (D)
Output states:	Whatever input fault status (except breakage or short circuit, the output is 0 V/mA), 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)

Wiring diagram



Model rules

NPGL-C☒☒☒D☒

- PB: BUS powered
  Default: Terminals powered
- The second output signal[note1]
  Default: null
- The first output signal[note1]
- The input signal[note1]

note1: input/output signal

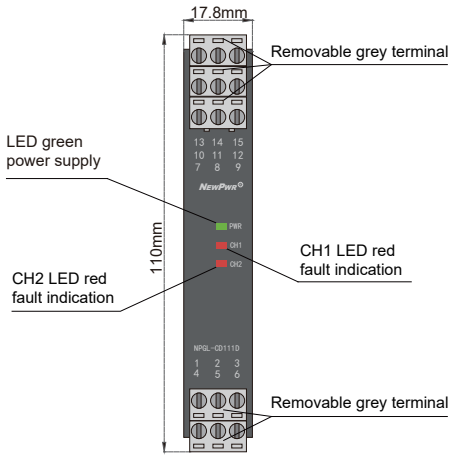
Number	Input/Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPGL-CD111D

Dual input, dual output

Input: 4 ~ 20 mA
Output: 4 ~ 20 mA

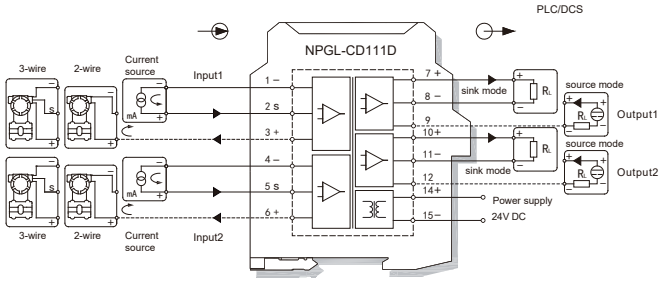
This temperature transmitter converts the thermal resistance signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	< 3 W
Input signal:	4 ~ 20 mA
Line resistance:	≤ 60 Ω
Available voltage:	open-circuit voltage ≤ 26 V voltage: ≥ 22 V at 20 mA
Output signal:	4 ~ 20mA (sink/source)
Load resistance:	source: R_L ≤ 500Ω sink: R_L < [(U-3)/0.02]Ω; U: Loop power supply
Accuracy:	0.1%F.S.
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 or short circuit, the output is 0 V/mA), 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 0mA, the maximum output value would not exceed 22 mA)

Wiring diagram



Model rules

NPGL-CD☒☒☒D☒

- PB: BUS powered
- Default: Terminals powered
- The second output signal[note1]
- The first output signal[note1]
- The input signal[note1]

note1: output signal

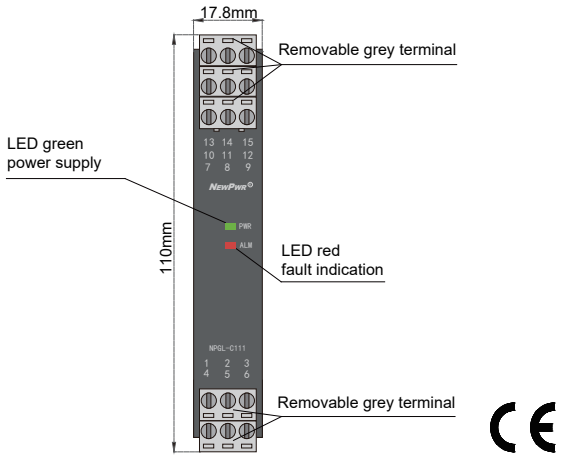
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPGL-C11
Single input, single output

NPGL-C111
Single input, dual output

Input: 4 ~ 20 mA
Output: 4 ~ 20 mA

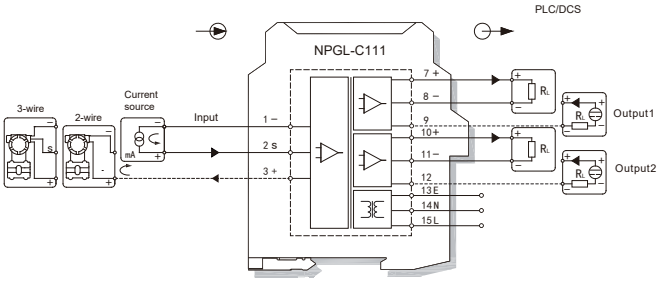
This isolator converts the current signals into current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



Parameters

Power supply:	85 V AC ~ 265 V AC (90 V DC ~ 360 V DC)
Power dissipation:	≤ 0.8 W (single output)
	≤ 2.5 W (double output)
Input signal:	4 ~ 20 mA
Input resistance:	≤ 60 Ω
Available voltage:	open-circuit voltage ≤ 26 V
	voltage: ≥ 22 V at 20 mA
Output signal:	4 ~ 20mA (sink/source)
Load resistance:	source: R_L ≤ 550Ω sink: R_L < [(U-3)/0.02]Ω;
	U: Loop power supply
Accuracy:	0.1%F.S.
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 or short circuit, the output is 0 V/mA), 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)

Wiring diagram



Model rules

NPGL-C☒☒☒

- The second output signal[note1]
  Default: null
- The first output signal[note1]
- The input signal[note1]

note1: input/output signal

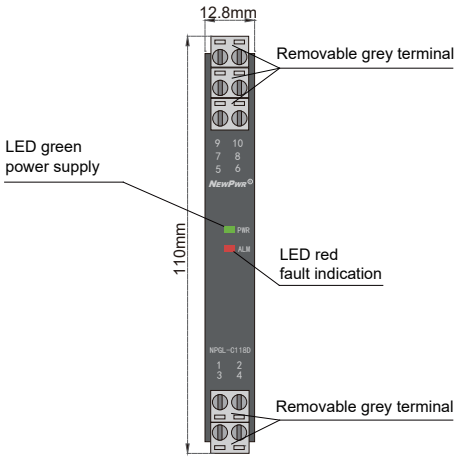
Number	Input/Output signal
1	4 ~ 20 mA
2	1 ~ 5V
3	0 ~ 10mA
4	0 ~ 5V
5	0 ~ 10 V
6	0 ~ 20 mA

NPGL-C118D

Single input, dual output

Input: 4 ~ 20 mA
Output: RS485, 4 ~ 20 mA

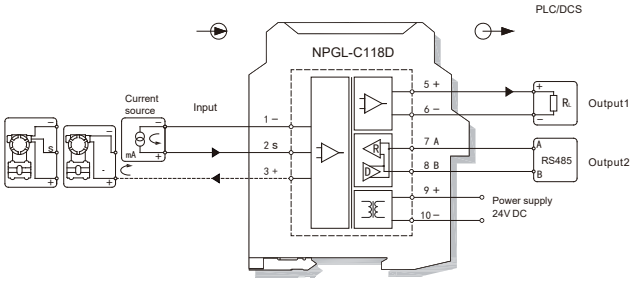
This isolator converts the current signals into current signals. It has RS485 interface. By using the MODBUS-RTU protocol, it can communicate with the other devices. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	1.7 W
Input signal:	4 ~ 20 mA
Input resistance:	approx. 100 Ω
Available voltage:	open-circuit voltage ≤ 26 V voltage: ≥ 22 V at 20 mA
Output signal:	Output1: 4 ~ 20 mA, Output2: RS485
Load resistance:	R_L ≤ 550 Ω
Communication parameters:	MODBUS-RTU, distance ≤ 1000 m, notes number ≤ 32
Comms bandwidth:	≤ 19.2 kbps
Accuracy:	0.1% F.S.
Temperature drift:	30 ppm/°C
Response time:	≤ 500 ms
Electromagnetic compatibility:	IEC 61326-3-1
Dielectric strength:	≥ 1500V AC (Input/Output/Power supply)
Insulation resistance:	≥ 100MΩ (Input/Output/Power supply)
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 or short circuit, the output is 0 V/mA), 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 0mA, the maximum output value would not exceed 22 mA)

Wiring diagram



Model rules

NPGL-C☒☒8D☒

- PB: BUS powered
  Default: Terminals powered
- The first output signal[note1]
  Default: null
- The input signal[note1]

note1: input/output signal

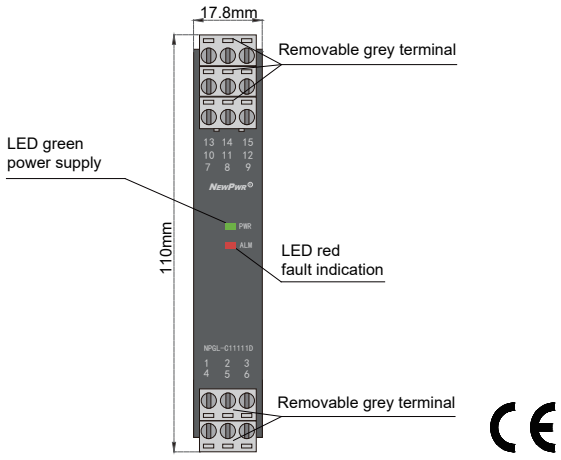
Number	Input/Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPGL-C1111D
Single input, three outputst

NPGL-C11111D
Single input, four outputs

Input: 4 ~ 20 mA
Output: 4 ~ 20 mA

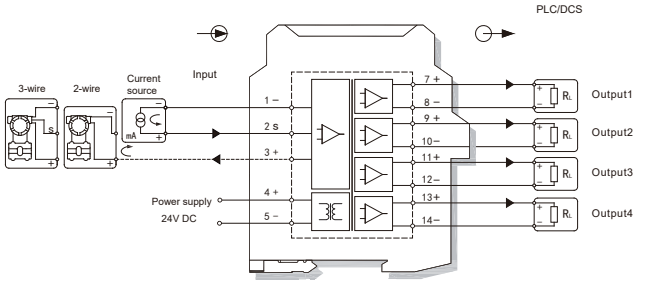
This isolator converts the current signals into current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	1.5 W (single output)
	2.0 W (double output)
Input signal:	4 ~ 20 mA
Input resistance:	≤ 60 Ω
Available voltage:	open-circuit voltage ≤ 26 V
	voltage: ≥ 22 V at 20 mA
Output signal:	4 ~ 20 mA
Load resistance:	R_L ≤ 500 Ω
Accuracy:	0.1%F.S.
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:	12.8 mm (W) × 110 mm (H) × 117 mm (D)
Output states:	Whatever input fault status (except breakage or short circuit, the output is 0 V/mA), 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)

Wiring diagram



Model rules

NPGL-C☒☒☒☒☒☒D☒

- PB: BUS powered
  Default: Terminals powered
- The forth output signal[note1]
  Default: null
- The third output signal[note1]
- The second output signal[note1]
- The first output signal[note1]
- The input signal[note1]

note1: input/output signal

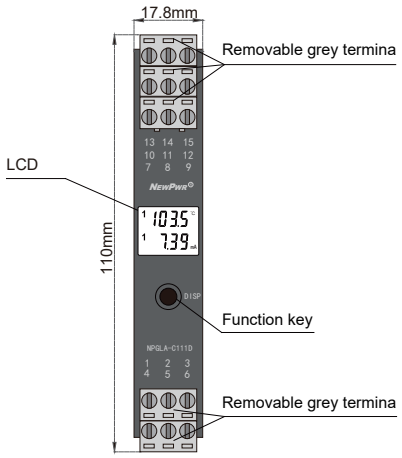
Number	input/Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPGLA-C11D Single input, single output

NPGLA-C111D Single input, dual output

Input: 4 ~ 20 mA
Output: 4 ~ 20 mA

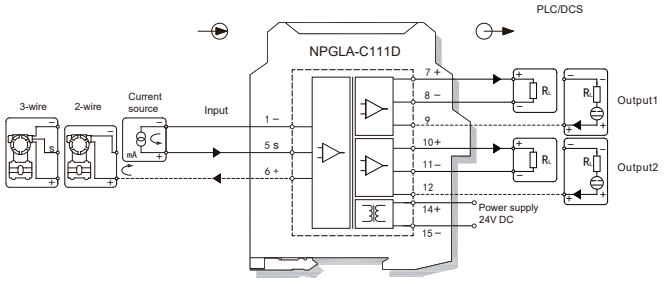
This isolator converts the current signals into current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Its stability and reliability are ensured by the applied techniques of digital adjustment, zero and full scale potentiometer exemption, automatic dynamic zero adjustment. Modify parameters by using PC or a handheld programmer.



Parameters

Power supply:	18 V DC ~ 32 V DC
Power dissipation:	1.3 W (single output) 1.8 W (double output)
Input signal:	4 ~ 20 mA
Input resistance:	≤ 60 Ω
Available voltage:	open-circuit voltage ≤ 25 V voltage: ≥ 23 V at 20 mA
Output signal:	4 ~ 20mA (sink/source)
Load resistance:	source: R_L ≤ 350Ω sink: R_L < [(U-3)/0.02]Ω; U: Loop power supply
Accuracy:	0.1%F.S.
Temperature drift:	50 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 or short circuit, the output is 0 V/mA), 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)

Wiring diagram



Model rules

NPGLA-C☒☒☒D

- The second output signal[note1]
- Default: null
- The first output signal[note1]
- The input signal[note1]

note1: input/output signal

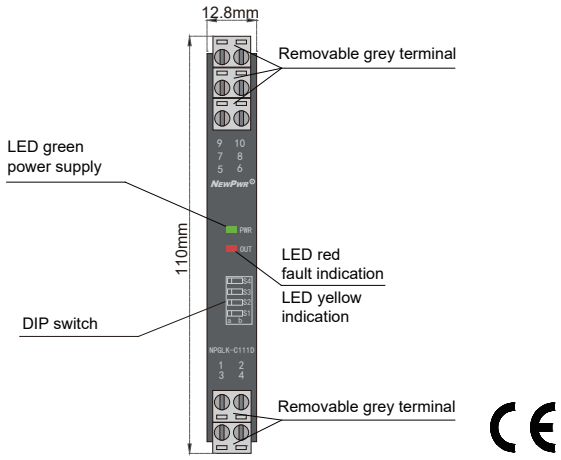
Number	Input/Output signal
1	4 ~ 20 mA
2	1 ~ 5V
3	0 ~ 10mA
4	0 ~ 5V
5	0 ~ 10 V
6	0 ~ 20 mA

NPGLK-C11D
Single input, single output

NPGLK-C111D
Single input, dual output

Input: dry contact or proximity switch
Output: Relay

This isolator converts switch or proximity detector signals (dry contact or NAMUR) to relay signals. Operation mode, the second output function (as a relay contact output or a fault output) and the input circuit fault detection function can be set with the DIP switch on the front side The input, output, and power supply are galvanically isolated from each other.



Parameters

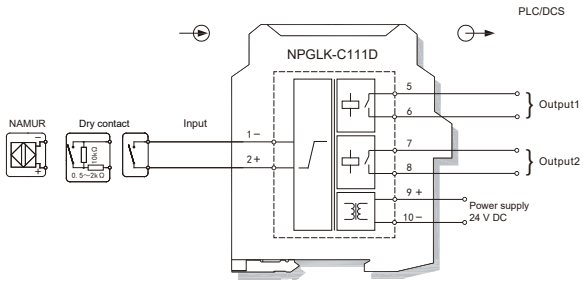
Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	1 W
Input signal:	Dry contact or NAMUR
Switching trigger point:	Input signal > 2.1 mA, signal “1”, the yellow LED is always bright Input signal < 1.2 mA, signal “0”, the yellow LED goes out
Open-circuit voltage:	Approx.8.5 V
Short-circuit current:	Approx.8.5 mA
Output signal:	Relay contact
Load capacity:	2 A/250 V AC, 2 A/30 V DC
LFD function:	When input current ≤ 80 μA, considers the input line breakdown, the output relay de-energized. If input current ≥ 6 mA, considers the input circuit short-circuit, the output relay de-energized, the indicator red flashing
Relay mechanical life:	> 10^5 switching cycles
Switching frequency:	< 10Hz
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:	12.8 mm (W) × 110 mm (H) × 117 mm (D)

DIP switch settings

NPGLK-C11D/NPGLK-C111D (NPGLK-C11D can set S1, S2)

Switch State	a	b
S1	output1 normal mode	inverted mode
S2	LFD on	LFD off
S3	output2 normal mode	fault signal output

Wiring diagram

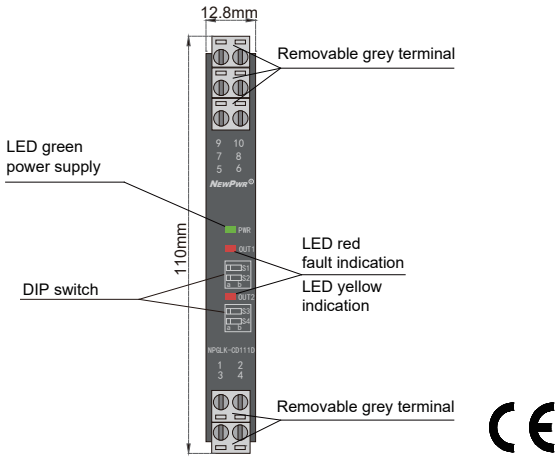


NPGLK-CD111D

Dual input, dual output

Input: dry contact or proximity switch
Output: Relay

This isolator converts switch or proximity detector signals (dry contact or NAMUR) to relay signals. The normal output sate and line fault detection function can be set with the DIP switch on the front side. The input, output, and power supply are galvanically isolated from each other.



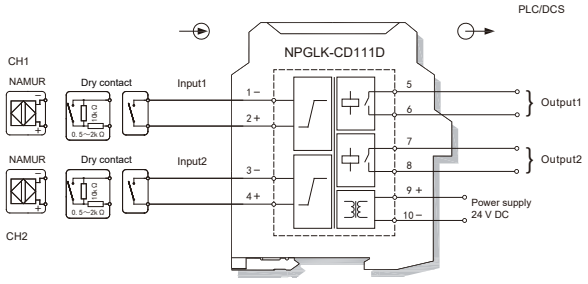
Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	1 W
Input signal:	Dry contact or NAMUR
Switching trigger point:	Input signal > 2.1 mA, signal “1”, the yellow LED is always bright Input signal < 1.2 mA, signal “0”, the yellow LED goes out
Open-circuit voltage:	Approx.8.5 V
Short-circuit current:	Approx.8.5 mA
Output signal:	Relay contact
Load capacity:	2 A/250 V AC, 2 A/30 V DC
LFD function:	When input current ≤ 80 μA, considers the input line breakdown, the output relay de-energized. If input current ≥ 6 mA, considers the input circuit short-circuit, the output relay de-energized, the indicator red flashing
Relay mechanical life:	> 10^5 switching cycles
Switching frequency:	< 10 Hz
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:	12.8 mm (W) × 110 mm (H) × 117 mm (D)

DIP switch settings

Switch State	a	b
S1	output1 normal mode	output1 inverted mode
S2	output1 LFD on	output1 LFD off
S3	output2 normal mode	output2 inverted mode
S4	output2 LFD on	output2 LFD off

Wiring diagram

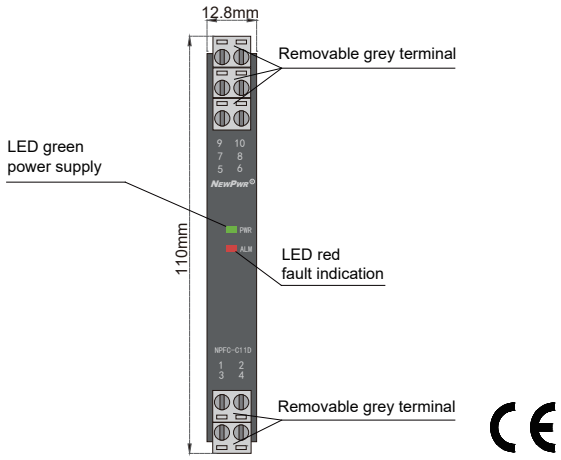


NPFC-C1D
Single input, single output

NPFC-C11D
Single input, dual output

Input: Frequency
Output: 4 ~ 20 mA

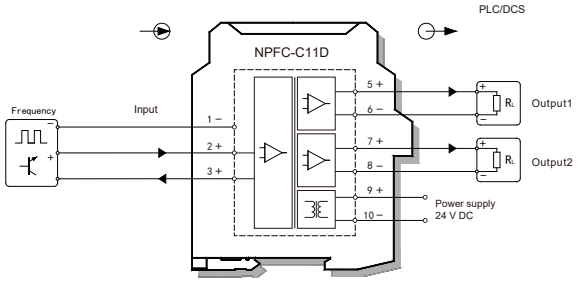
This frequency transmitter converts the frequency signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	0.8 W (single output)
	1.3 W (double output)
Input signal:	frequency
Frequency range:	0.1 Hz ~ 100 kHz
Pulse width:	≥ 5 μs
Input impedance:	≥ 10 kΩ
Switching trigger point:	Low level: 0 V ~ 2 V, High level: 4 V ~ 30 V
Distribution voltage:	12 V DC: Distribution voltage ≥ 11 V at 20 mA
	24 V DC: Distribution voltage ≥ 22 V at 20 mA
Output signal:	4 ~ 20 mA
Load resistance:	R_L ≤ 550 Ω
Accuracy:	0.1%F.S.
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:	12.8 mm (W) × 110 mm (H) × 117 mm (D)
Fault states:	Input signal state indicator (red), it is remain bright when input over-range; it is flicker when input breakage.

Wiring diagram



Model rules

NPFC-C☒☒D☒

- PB: BUS powered
- Default: Terminals powered
- The second output signal[note1]
- Default: null
- The first output signal[note1]

note1: output signal

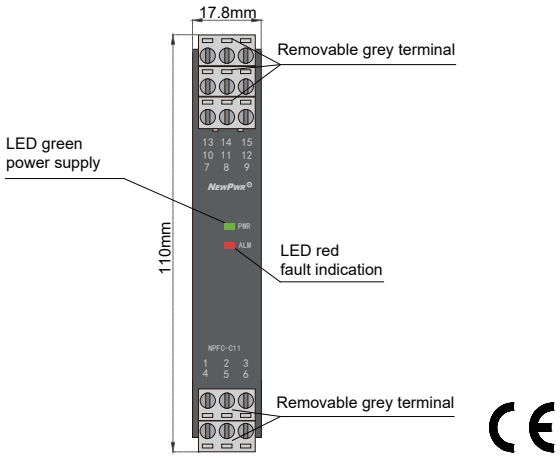
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPFC-C1
Single input, single output

NPFC-C11
Single input, dual output

Input: Frequency
Output: 4 ~ 20 mA

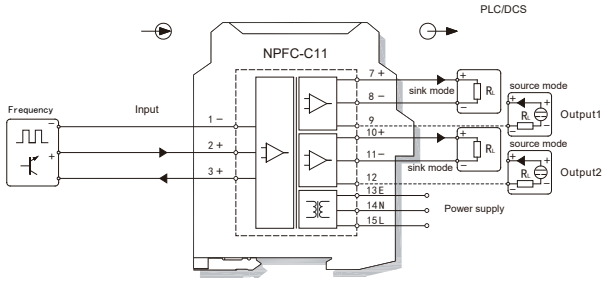
This frequency transmitter converts the frequency signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



Parameters

Power supply:	85 V AC ~ 265 V DC (90 V DC ~ 360 V DC)
Power dissipation:	≤ 0.8 W (single output, full-load) ≤ 2.5 W (double output, full-load)
Input signal:	frequency
Frequency range:	0.1 Hz ~ 100 kHz
Pulse width:	≥ 5 μs
Input impedance:	≥ 10 kΩ
Switching trigger point:	Low level: 0 V ~ 2 V, High level: 4 V ~ 30 V
Distribution voltage:	24 V DC, ≥ 23 V at 20 mA
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
Accuracy:	0.1%F.S.
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)
Fault states:	Input signal state indicator (red), it is remain bright when input over-range; it is flicker when input breakage.

Wiring diagram



Model rules

NPFC-C☒☒

The second output signal[note1]
Default: null

The first output signal[note1]

note1: output signal

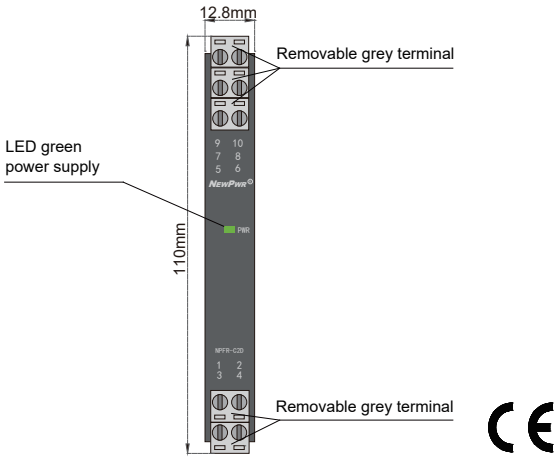
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPFR-C1D
Single input, single output

NPFR-C2D
Single input, dual output

Input: Frequency
Output: 1:1

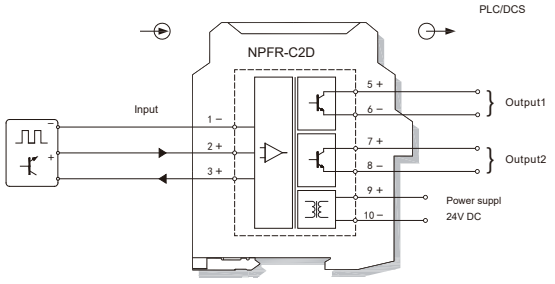
This pulse isolator converts the frequency signals to 1:1 frequency signals (configurable logic level default, open collector or emitterr follower can be selected in ordering). It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)	
Power dissipation:	0.9 W (single output, full-load)	
	1.8 W (double output, full-load)	
Input signal:	frequency	
Frequency range:	0.1 Hz ~ 100 kHz	
Pulse width:	≥ 5 μs	
Switching trigger point:	Low level: 0 V ~ 2 V, High level: 4 V ~ 30 V	
Distribution voltage:	12 V DC: Distribution voltage ≥ 11 V at 20 mA	
	24 V DC: Distribution voltage ≥ 22 V at 20 mA	
Output signal:	Open collector	High level: V_{CC} (≤ 30 V)
		Low level: ≤ 2 V
		drive current: ≤ 10 mA
	Emitter follower	High level: V_{CC}-2 V
		Low level: ≤ 0.5 V
		drive current: ≤ 10 mA
	Logic level (default)	High level: 18 V ≤ V_H ≤ 24 V
		Low level: V_L ≤ 2 V
		Load resistance: ≥ 2kΩ
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:	12.8 mm (W) × 110 mm (H) × 117 mm (D)	

Wiring diagram

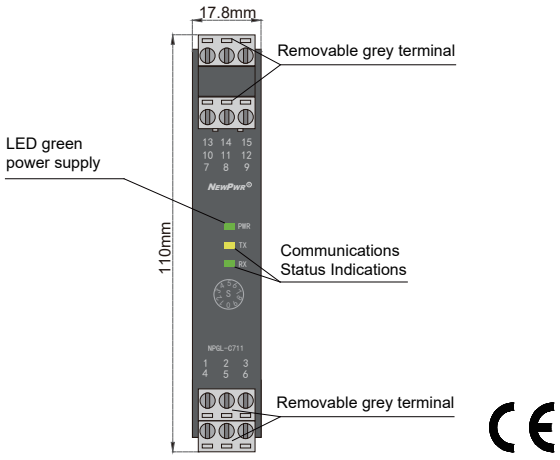


NPGL-C711

Single input, single output

Input: RS-485
Output: RS-485

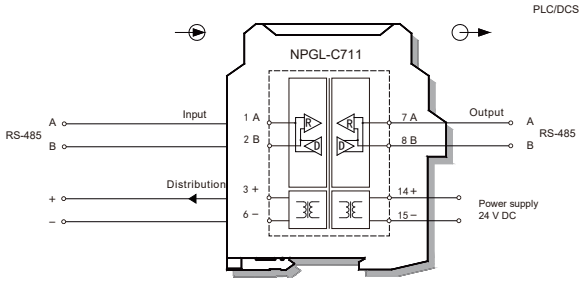
This isolator converts the RS485 digital signals to RS485 digital signals, and provides isolated power supply for field devices. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	≤ 2 W (Distribution: 8 V/9 V/12 V, 50 mA)
	≤ 3.5 W (Distribution: 5 V/ 6 V, 100 mA)
Input signal:	RS-485
Control mode:	half-duplex
Output signal:	RS-485
Transmission delay:	≤ 5 μs
Transmission rate:	≤ 56 kbps
Distribution voltage:	Refer to rotary switch setting
Voltage tolerance:	±10%
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)

Wiring diagram



Rotary switch setting

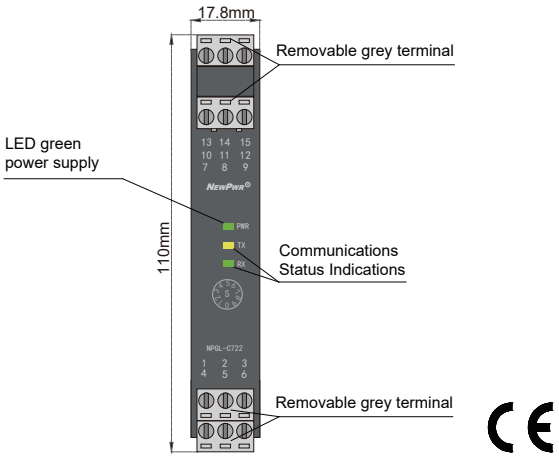
Rotary switch	Distribution
S0	5V DC，100mA
S1	6V DC，100mA
S2	8V DC，50mA
S4	9V DC，50mA
S8	12V DC，50mA

NPGL-C722

Single input, single output

Input: RS-232
Output: RS-232

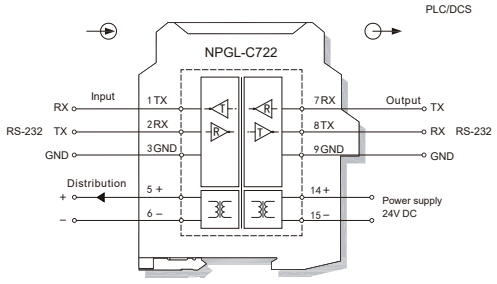
This isolator converts the RS232 digital signals to RS232 digital signals, and provides isolated power supply for field devices. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	≤ 2 W (Distribution: 8 V/9 V/12 V, 50 mA)
	≤ 3.5 W (Distribution: 5 V/ 6 V, 100 mA)
Input signal:	RS-232
Control mode:	half-duplex
Output signal:	RS-232
Transmission delay:	≤ 5 μs
Transmission rate:	≤ 56 kbps
Distribution voltage:	Refer to rotary switch setting
Voltage tolerance:	±10%
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)

Wiring diagram



Rotary switch setting

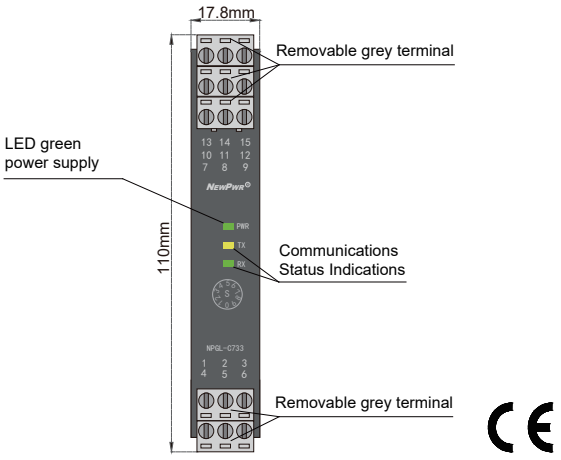
Rotary switch	Distribution
S0	5V DC, 100mA
S1	6V DC, 100mA
S2	8V DC, 50mA
S4	9V DC, 50mA
S8	12V DC, 50mA

NPGL-C733

Single input, single output

Input: RS-422
Output: RS-422

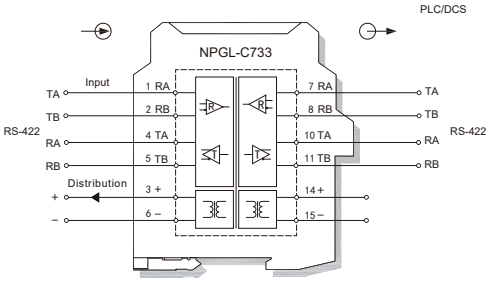
This isolator converts the RS422 digital signals to RS422 digital signals, and provides isolated power supply for field devices. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection
Power dissipation:	≤ 2 W (Distribution: 8 V/9 V/12 V, 50 mA)
	≤ 3.5 W (Distribution: 5 V/ 6 V, 100 mA)
Input signal:	RS-422
Control mode:	full-duplex
Output signal:	RS-422
Transmission delay:	≤ 5 μs
Transmission rate:	≤ 56 kbps
Distribution voltage:	Refer to rotary switch setting
Voltage tolerance:	±10%
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)

Wiring diagram



Rotary switch setting

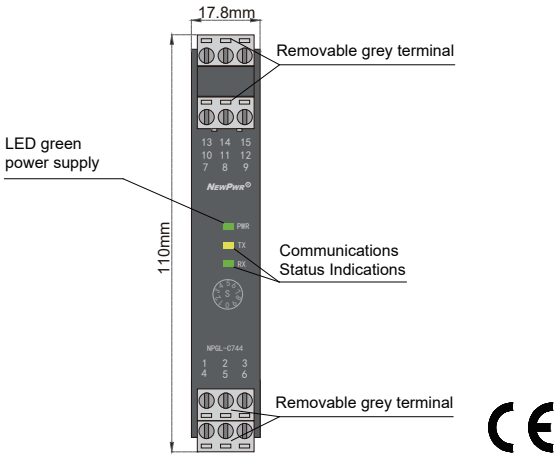
Rotary switch	Distribution
S0	5V DC，100mA
S1	6V DC，100mA
S2	8V DC，50mA
S4	9V DC，50mA
S8	12V DC，50mA

NPGL-C744

Single input, single output

Input: CAN
Output: CAN

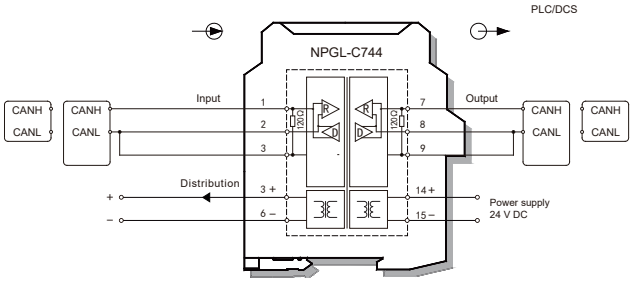
This isolator converts the CAN digital signals to CAN digital signals, and provides isolated power supply for field devices. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	≤ 2 W (Distribution: 8 V/9 V/12 V, 50 mA)
	≤ 4 W (Distribution: 5 V/ 6 V, 100 mA)
Input signal:	CAN
Control mode:	half-duplex
Output signal:	CAN
Transmission delay:	≤ 2 μs
Transmission rate:	≤ 300 kbps
Drive nodes:	≤ 10
Distribution voltage:	Refer to rotary switch setting
Voltage tolerance:	±10%
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)

Wiring diagram



Rotary switch setting

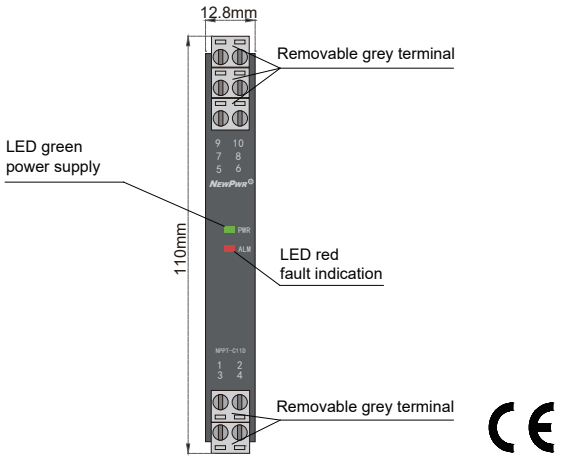
Rotary switch	Distribution
S0	5V DC, 100mA
S1	6V DC, 100mA
S2	8V DC, 50mA
S4	9V DC, 50mA
S8	12V DC, 50mA

NPPT-C1D Single input, single output

NPPT-C11D Single input, dual output

Input: 0 ~ 10 kΩ
Output: 4 ~ 20 mA

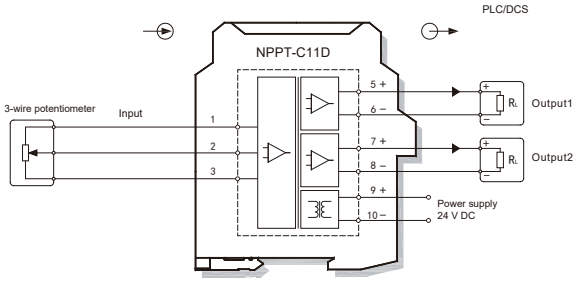
This potentiometer transmitter converts the 3-wire potentiometer signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	0.8 W (single output) 1.2 W (double output)
Input signal:	3-wire potentiometer (0 ~ 10 kΩ)
Output signal:	4 ~ 20 mA
Load resistance:	R_L ≤ 550 Ω
Accuracy:	0.1% F.S.
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:	12.8 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).

Wiring diagram



Model rules

NPPT-C☒☒D☒

- PB: BUS powered
  Default: Terminals powered
- The second output signal[note1]
  Default: null
- The first output signal[note1]

note1: output signal

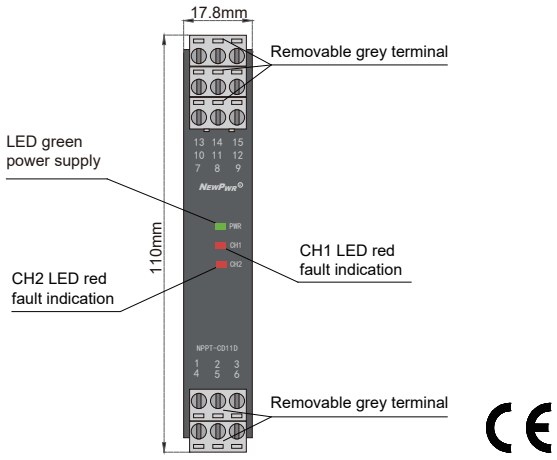
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPPT-CD11D

Dual input, dual output

Input: 0 ~ 10 kΩ
Output: 4 ~ 20 mA

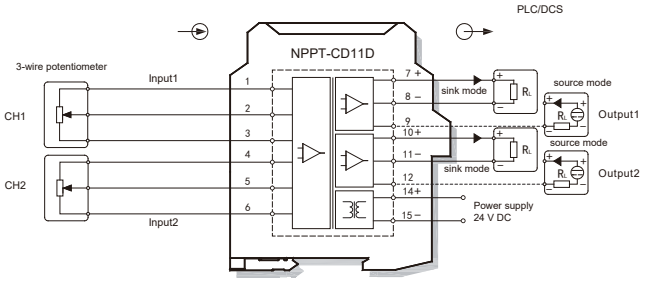
This potentiometer transmitter converts the 3-wire potentiometer signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other. Modify parameters by using PC or a handheld programmer.



Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	1.2 W
Input signal:	3-wire potentiometer (0 ~ 10 kΩ)
Output signal:	4 ~ 20mA (sink/source)
Load resistance:	source: R_L ≤ 550Ω sink: R_L < [(U-3)/0.02]Ω; U: Loop power supply
Accuracy:	0.1% F.S.
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)

Wiring diagram



Model rules

NPPT-CD☒☒D☒

- PB: BUS powered
  Default: Terminals powered
- The second output signal[note1]
- The first output signal[note1]

note1: output signal

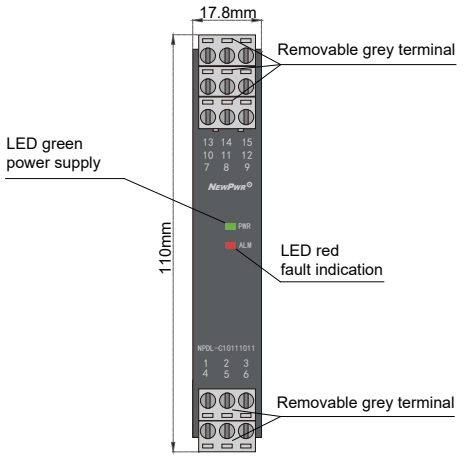
Number	Output signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA

NPDL-C10111011

Single input, single output

Input: 0 ~ 60 V AC
Output: 4 ~ 20 mA

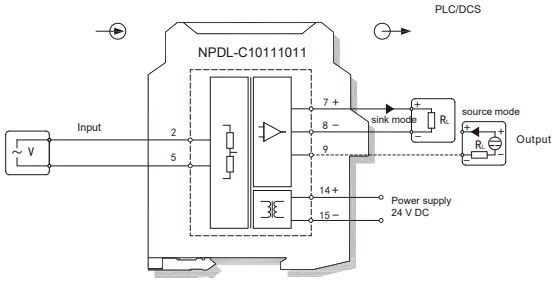
This AC voltage transmitter converts the 0 ~ 60 V AC signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18 V DC ~ 32 V DC (Reverse power protection)
Power dissipation:	< 1 W
Input signal:	0 ~ 60 V AC
Frequency range:	40 Hz ~ 1 kHz
Overload capacity:	double input nominal value
Output signal:	4 ~ 20mA (sink/source)
Load resistance:	source: R_L ≤ 550Ω sink: R_L < [(U-3)/0.022]Ω; U: Loop power supply
Accuracy:	0.2% F.S. (0 ~ 110%)
Temperature drift:	50ppm/°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)

Wiring diagram



Model rules

NPDL-C101☒☒011

The output signal[note2]

The input signal[note1]

note1: input signal

Number	Input signal
1	0 ~ 60 V AC
2	0 ~ 110 V AC
3	0 ~ 220 V AC
4	0 ~ 380 V AC
5	0 ~ 600 V AC
6	0 ~ 1000 V AC
7	User customized signal type

note2: output signal

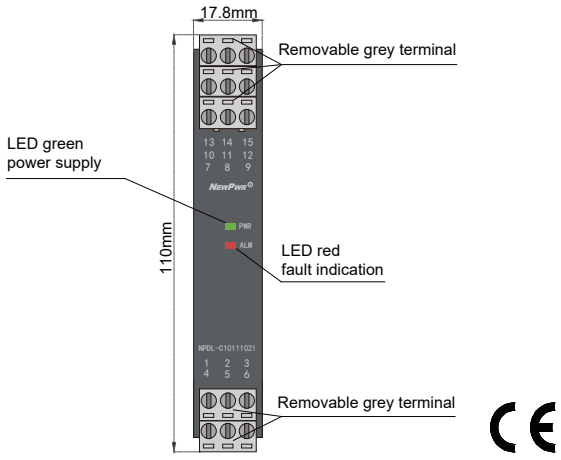
Number	Input signal
1	4 ~ 20 mA
2	1 ~ 5V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA
7	User customized signal type

NPDL-C10111021

Single input, single output

Input: 0 ~ 60 V AC
Output: 4 ~ 20 mA

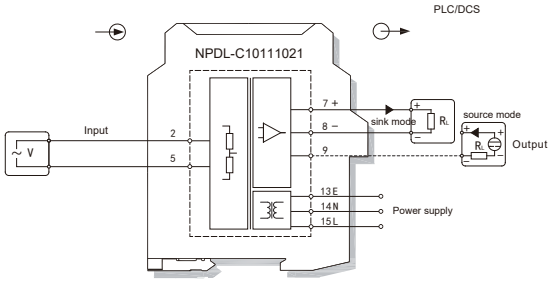
This AC voltage transmitter converts the 0 ~ 60 V AC signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	85 V AC ~ 265 V AC (120 V DC ~ 360 V DC)
Power dissipation:	< 2 W
Input signal:	0 ~ 60 V AC
Frequency range:	40 Hz ~ 1 kHz
Overload capacity:	double input nominal value
Output signal:	4 ~ 20mA (sink/source)
Load resistance:	source: R_L ≤ 550Ω sink: R_L < [(U-3)/0.022]Ω; U: Loop power supply
Accuracy:	0.2% F.S. (0 ~ 110%)
Temperature drift:	50ppm/°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)

Wiring diagram



Model rules

NPDL-C101☒☒021

The output signal[note2]

The input signal[note1]

note1: input signal

Number	Input signal
1	0 ~ 60 V AC
2	0 ~ 110 V AC
3	0 ~ 220 V AC
4	0 ~ 380 V AC
5	0 ~ 600 V AC
6	0 ~ 1000 V AC
7	User customized signal type

note2: output signal

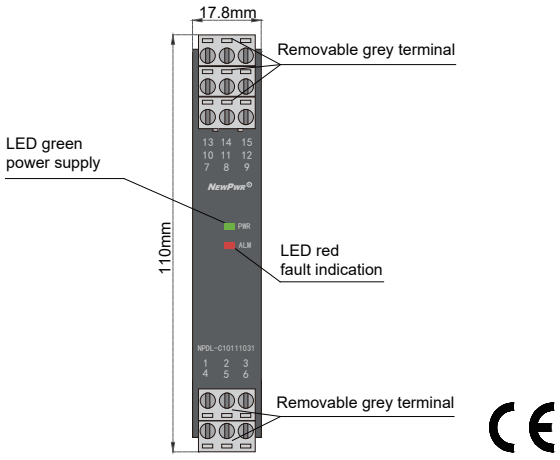
Number	Input signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA
7	User customized signal type

NPDL-C10111031

Single input, single output

Input: 0 ~ 60 V AC
Output: 4 ~ 20 mA

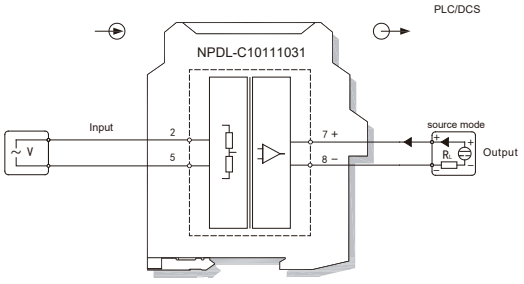
This AC voltage transmitter converts the 0 ~ 60 V AC signals to current signals. It can work without an independent power supply. The input, output are galvanically isolated from each other.



Parameters

Power supply:	12 V DC ~ 30 V DC (Reverse power protection)
Input signal:	0 ~ 60 V AC
Frequency range:	40 Hz ~ 1 kHz
Overload capacity:	double input nominal value
Output signal:	4 ~ 20 mA
Load resistance:	R_L < [(U-12)/0.022]Ω; U: Loop power supply
Accuracy:	0.2% F.S. (0 ~ 110%)
Temperature drift:	50ppm/°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:	17.8 mm (W) × 110 mm (H) × 117 mm (D)

Wiring diagram



Model rules

NPDL-C101☒1031

The input signal[note1]

note1: input signal

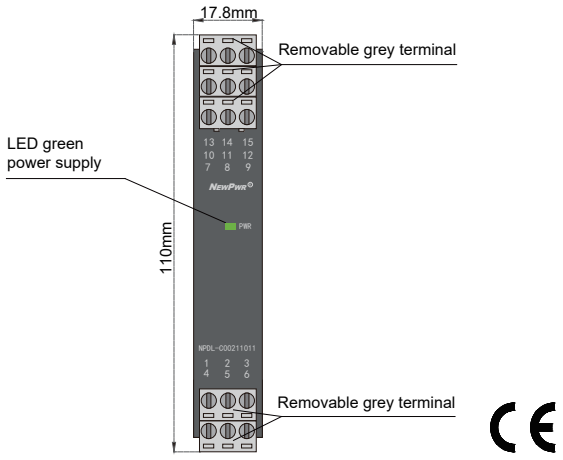
Number	Input signal
1	0 ~ 60 V AC
2	0 ~ 110 V AC
3	0 ~ 220 V AC
4	0 ~ 380 V AC
5	0 ~ 600 V AC
6	0 ~ 1000 V AC
7	User customized signal type

NPDL-C00211011

Single input, single output

Input: 0 ~ 1A AC
Output: 4 ~ 20 mA

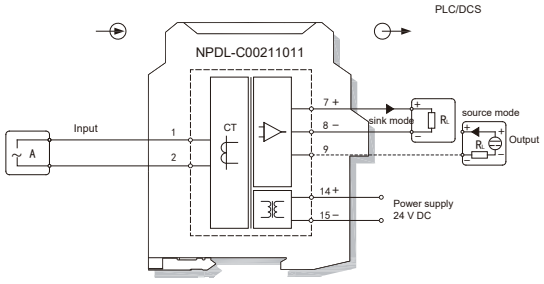
This AC current transmitter converts the 0 ~ 1 A AC signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18 V DC ~ 32 V DC (Reverse power protection)
Power dissipation:	< 1 W
Input signal:	0 ~ 1 A AC
Frequency range:	40 Hz ~ 400 Hz
Overload capacity:	double input nominal value
Output signal:	4 ~ 20mA (sink/source)
Load resistance:	source: R_L ≤ 550Ω sink: R_L < [(U-3)/0.024]Ω; U: Loop power supply
Accuracy:	0.2% F.S. (0 ~ 120%)
Temperature drift:	50ppm/°C
Response time:	≤ 330 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)

Wiring diagram



Model rules

NPDL-C002☒☒011

The output signal[note2]

The input signal[note1]

note1: input signal

Number	Input signal
1	0 ~ 1 A AC
2	0 ~ 2.5 A AC
3	0 ~ 5 A AC
4	0 ~ 10 A AC
7	User customized signal type

note2: output signal

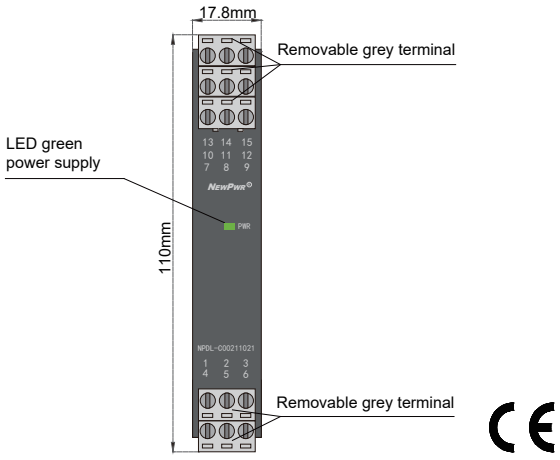
Number	Input signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA
7	User customized signal type

NPDL-C00211021

Single input, single output

Input: 0 ~ 1 A AC
Output: 4 ~ 20 mA

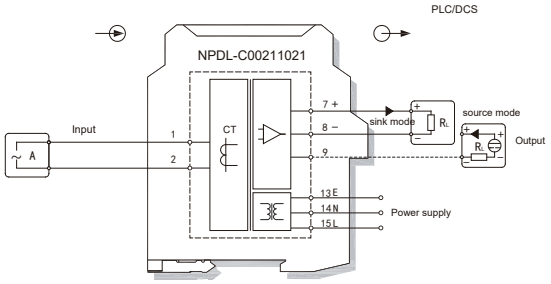
This AC current transmitter converts the 0 ~ 1 A AC signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	85 V AC ~ 265 V AC (120 V DC ~ 360 V DC)
Power dissipation:	< 2 W
Input signal:	0 ~ 1 A AC
Frequency range:	40 Hz ~ 400 Hz
Overload capacity:	double input nominal value
Output signal:	4 ~ 20mA (sink/source)
Load resistance:	source: R_L ≤ 550Ω sink: R_L < [(U-3)/0.024]Ω; U: Loop power supply
Accuracy:	0.2% F.S. (0 ~ 120%)
Temperature drift:	50ppm/°C
Response time:	≤ 330 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)

Wiring diagram



Model rules

NPDL-C002☒☒021

- The output signal[note2]
- The input signal[note1]

note1: input signal

Number	Input signal
1	0 ~ 1 A AC
2	0 ~ 2.5 A AC
3	0 ~ 5 A AC
4	0 ~ 10 A AC
7	User customized signal type

note2: output signal

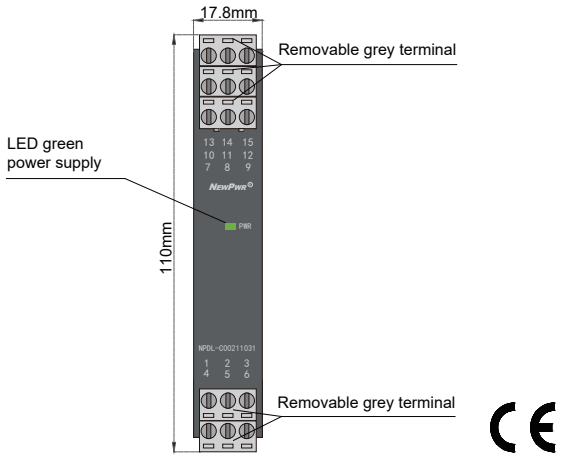
Number	Input signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5 V
5	0 ~ 10 V
6	0 ~ 20 mA
7	User customized signal type

NPDL-C00211031

Single input, single output

Input: 0 ~ 1A AC
Output: 4 ~ 20 mA

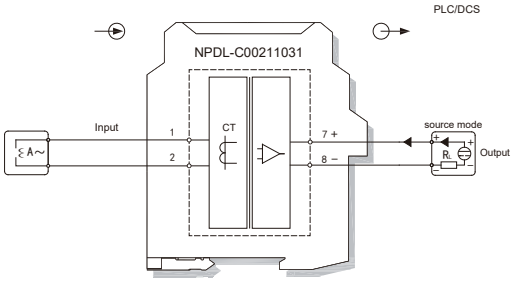
This AC current transmitter converts the 0 ~ 1 A AC signals to current signals. It can work without an independent power supply. The input, output are galvanically isolated from each other.



Parameters

Power supply:	12 V DC ~ 30 V DC (Reverse power protection)
Input signal:	0 ~ 1 A AC
Frequency range:	40 Hz ~ 400 Hz
Overload capacity:	double input nominal value
Output signal:	4 ~ 20 mA
Load resistance:	R_L < [(U-12)/0.02]Ω; U: Loop power supply
Accuracy:	0.2% F.S. (0 ~ 120%)
Temperature drift:	50ppm/°C
Response time:	≤ 330 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:	17.8 mm (W) × 110 mm (H) × 117 mm (D)

Wiring diagram



Model rules

NPDL-C002☒1031

The input signal[note1]

note1: input signal

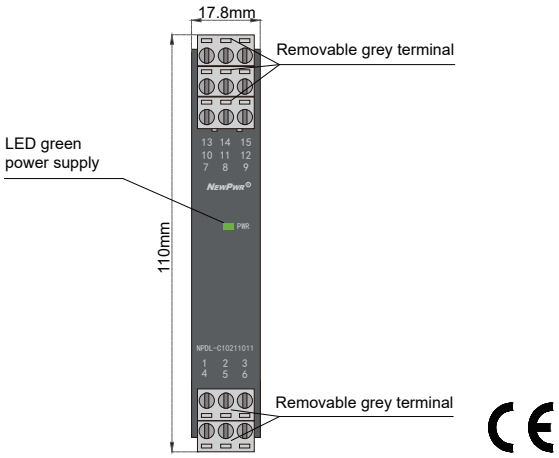
Number	Input signal
1	0 ~ 1 A AC
2	0 ~ 2.5 A AC
3	0 ~ 5 A AC
4	0 ~ 10 A AC
7	User customized signal type

NPDL-C10211011

Single input, single output

Input: 0 ~ 1A AC
Output: 4 ~ 20 mA

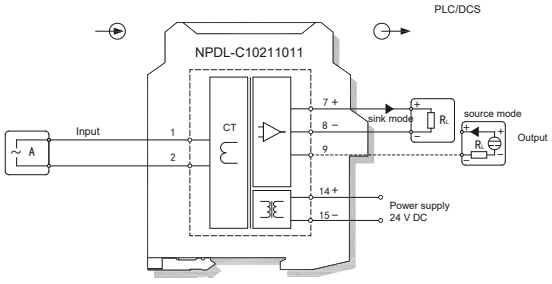
This TRMS AC current transmitter converts the 0 ~ 1 A AC signals to current signals. It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18 V DC ~ 32 V DC (Reverse power protection)
Power dissipation:	< 1 W
Input signal:	0 ~ 1A AC
Frequency range:	40 Hz ~ 1 kHz
Overload capacity:	double input nominal value
Output signal:	4 ~ 20mA (sink/source)
Load resistance:	source: R_L ≤ 550Ω sink: R_L < [(U-3)/0.024]Ω; U: Loop power supply
Accuracy:	0.2% F.S. (0 ~ 120%)
Temperature drift:	50ppm/°C
Response time:	≤ 330 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)

Wiring diagram



Model rules

NPDL-C102☒☒011

The output signal[note2]

The input signal[note1]

note1: input signal

Number	Input signal
1	0 ~ 1 A AC
2	0 ~ 2.5 A AC
3	0 ~ 5 A AC
4	0 ~ 10 A AC
7	User customized signal type

note2: output signal

Number	Input signal
1	4 ~ 20 mA
2	1 ~ 5 V
3	0 ~ 10 mA
4	0 ~ 5V
5	0 ~ 10 V
6	0 ~ 20 mA
7	User customized signal type