

NPGL-HM11D

NPGL-HM111D

NPGL-HMD111D

Input: 4 ~ 20 mA

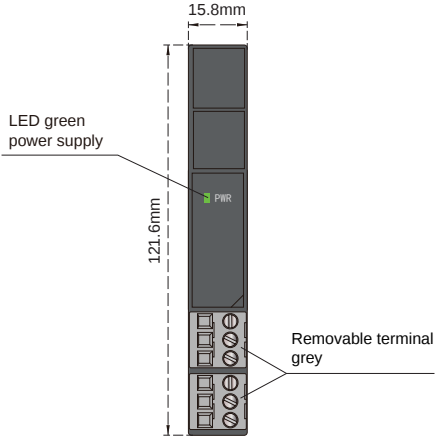
Output: 4 ~ 20 mA

single input, single output

single input, double output

double input, double output

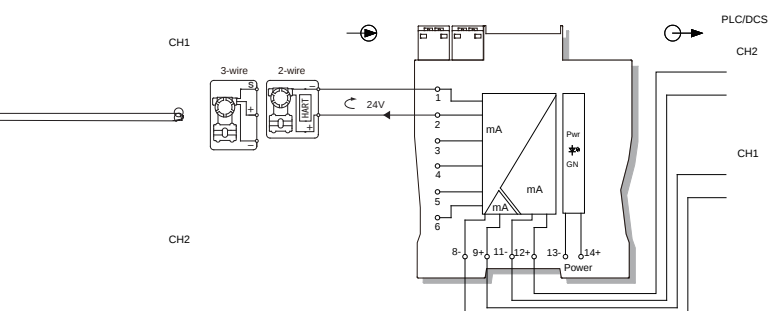
This isolator converts the current or voltage signals to current or voltage signals. It allows transmission of HART communication signals. The input, output, and power supply are galvanically isolated from each other.



| Technical data                 |                                                                                                                                                                                                      |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power supply:                  | 18 V DC~32 V DC (Reverse power protection)                                                                                                                                                           |
| Power dissipation:             | ≤ 1.3 W (24V DC, single input single output)<br>≤ 1.8 W (24V DC, single input double output)<br>≤ 2.5 W (24V DC, double input double output)                                                         |
| Input signal:                  | Current: 0/4 ~ 20mA; 0 ~ 10mA<br>Voltage: 0/1 ~ 5V; 0 ~ 10V                                                                                                                                          |
| Input resistance:              | Current: approx. 50 Ω<br>Voltage: ≥ 1MΩ                                                                                                                                                              |
| Available voltage:             | open-circuit voltage: ≤ 27 V<br>voltage: ≥ 22 V at 20 mA                                                                                                                                             |
| Output signal:                 | Sink mode: 4 ~ 20mA<br>Current: 0/4 ~ 20mA; 0 ~ 10mA<br>Voltage: 0/1 ~ 5V; 0 ~ 10V                                                                                                                   |
| Load resistance:               | Sink mode: $R_L \leq [(U-3)/0.02]\Omega$ ; U: Loop power supply<br>0/4 ~ 20mA: $R_L \leq 450\Omega$ ; 0 ~ 10mA: $R_L \leq 900\Omega$<br>0/1 ~ 5V: $R_L \geq 1M\Omega$ ; 0 ~ 10V: $R_L \geq 2M\Omega$ |
| Accuracy:                      | ± 0.1%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)<br>≥ 500 V AC (Power supply/Output)                                                                                                                                       |
| Insulation resistance:         | ≥ 100 MΩ ( Input /Output/Power supply)                                                                                                                                                               |
| Operation temperature:         | -20°C ~ +60°C                                                                                                                                                                                        |
| Storage temperature:           | -40°C ~ +80°C                                                                                                                                                                                        |
| Dimension:                     | 15.8 mm (W) × 121.6 mm (H) × 104.8 mm (D)                                                                                                                                                            |

| Model rules  |    |                          |                          |                          |                          | Description              |
|--------------|----|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| NPWD-HM      |    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Isolator                 |
| Channel      |    |                          |                          |                          |                          | Single as default        |
|              | D  |                          |                          |                          |                          | Double channel           |
| Input        | 1  |                          |                          |                          |                          | 4~20mA                   |
|              | 2  |                          |                          |                          |                          | 1~5V                     |
|              | 3  |                          |                          |                          |                          | 0~10mA                   |
|              | 4  |                          |                          |                          |                          | 0~5V                     |
|              | 5  |                          |                          |                          |                          | 0~10V                    |
|              | 6  |                          |                          |                          |                          | 0~20mA                   |
| Output1      | 1  |                          |                          |                          |                          | 4~20mA                   |
|              | 1S |                          |                          |                          |                          | Output sink mode: 4~20mA |
|              | 2  |                          |                          |                          |                          | 1~5V                     |
|              | 3  |                          |                          |                          |                          | 0~10mA                   |
|              | 4  |                          |                          |                          |                          | 0~5V                     |
|              | 5  |                          |                          |                          |                          | 0~10V                    |
| Output2      | 6  |                          |                          |                          |                          | 0~20mA                   |
|              |    |                          |                          |                          |                          | None as default          |
|              | 1  |                          |                          |                          |                          | 4~20mA                   |
|              | 1S |                          |                          |                          |                          | Output sink mode: 4~20mA |
|              | 2  |                          |                          |                          |                          | 1~5V                     |
|              | 3  |                          |                          |                          |                          | 0~10mA                   |
| Power supply | 4  |                          |                          |                          |                          | 0~5V                     |
|              | 5  |                          |                          |                          |                          | 0~10V                    |
|              | 6  |                          |                          |                          |                          | 0~20mA                   |
|              | D  |                          |                          |                          |                          | 24V DC                   |

## Wiring diagram



24V DC, double current input, double source current output

24V DC, double current input, double sink current output

24V DC, single voltage input, double current / voltage output