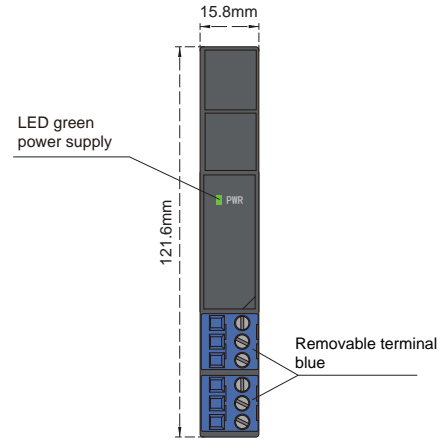


AI Isolated Safety Barrier

NPEXA-HM3D11 double input, double output

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

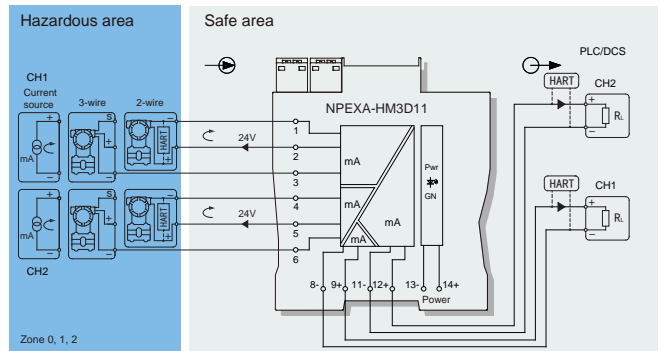
This isolated safety barrier detects loop current and converts it from a hazardous area into current signals to a safe area by isolation, and also provides transmitters with power in the hazardous area. It allows transmission of HART communication signals. The input, output, and power supply are galvanically isolated from each other.



Technical data

Power supply:	18 V DC~32 V DC (Reverse power protection)
Power dissipation:	2.5 W (24V DC, double output)
Input signal:	4 ~ 20mA, HART
Input resistance:	approx. 75 Ω
Available voltage:	open-circuit voltage ≤ 26 V voltage: ≥ 15.5 V at 20 mA
Output signal:	4 ~ 20mA, HART
Load resistance:	RL ≤ 450Ω
Accuracy:	± 0.1%F.S.
Temperature drift:	0.005%F.S./°C
Response time:	≤ 2ms
Electromagnetic compatibility:	IEC 61326-3-1
Dielectric strength:	≥ 2500 V AC (intrinsically safe side / non-intrinsically safe side) ≥ 500 V AC (Power supply side /non-intrinsically safe side)
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)

Wiring diagram



Explosive-proof parameters

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)
Explosive-proof grade: [Ex ia Ga] II C
Um: 250 V
Certified parameters (Terminals 1, 3; 4, 6):
Uo=5V
II C : Co=70μF
II B : Co=700μF
II A : Co=700μF
Certified parameters (Terminals 2, 3; 5, 6):
Uo=28V, Io=93mA, Po=651mW
II C : Co=0.08μF , Lo=4mH
II B : Co=0.6μF , Lo=12mH
II A : Co=2.1μF , Lo=32mH

Other ordering information

Type	Input	Output1	Output2	Power supply
NPEXA-HM3D22	4 ~ 20mA	1 ~ 5V	1 ~ 5V	backplane mounting
NPEXA-HM3D55	0 ~ 20mA	0 ~ 10V	0 ~ 10V	backplane mounting