

AI (loop powered) Isolated Barrier

NPEXA-CM31L

Single input, single output

NPEXA-CM3D11L

Double inputs, double outputs

Input: 4 ~ 20 mA

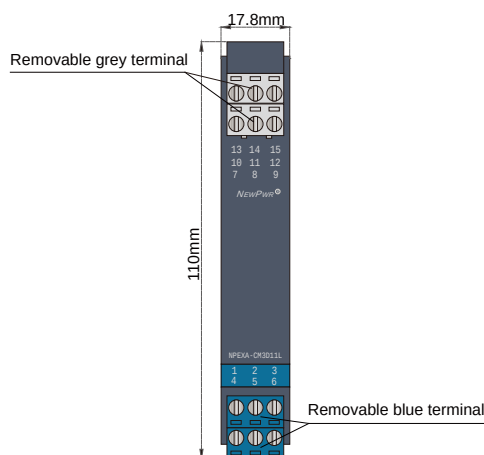
Output: 4 ~ 20 mA

Analog input isolated barrier, it provides transmitters with power in the hazardous area and transfers 4~20mA signals from a hazardous area to a safe area. It allows transmission of HART communication signals. The input and output is galvanically isolated from each other.

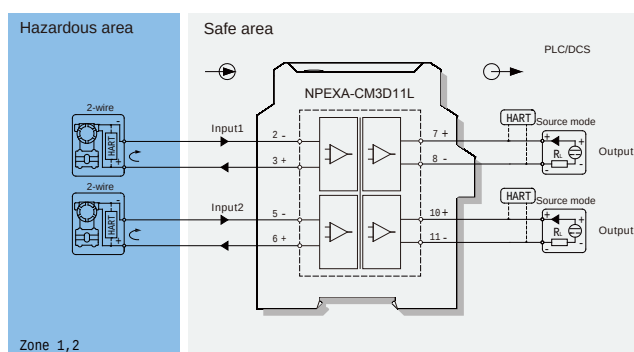


Parameters

Loop Powered:	18 V DC ~ 30 V DC (Reverse power protection)
Input signal:	4 ~ 20mA, HART
Available voltage:	(U-6-R _L ×I)V, U≤ 24V; (18-R _L ×I)V, U> 24V; U is loop powered voltage
Output signal:	4 ~ 20 mA, HART
Accuracy:	0.4%F.S.
Temperature drift:	0.01%F.S./°C
Response time:	≤ 2ms
Electromagnetic compatibility:	IEC 61326-3-1
Dielectric strength:	≥ 2500V AC (intrinsically safe side / non-intrinsically safe side)
Insulation resistance:	≥ 100MΩ (Input /Output)
Operation temperature:	-20°C ~ +60°C
Storage temperature:	-40°C ~ +80°C
Dimension:	17.8mm (W) × 110mm (H) × 117mm (D)



Wiring diagram



Explosive-proof parameters

National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI)

Ex marking: [Ex ib Gb] IIC

[Ex ib Db] IIIC

Um: 250V

Certified parameters (Terminals 2, 3; 5, 6):

U₀=23.1V, I₀=27mA, P₀=623.7mW

IIC: Co=0.06μF, Lo=1.9mH

IIIC(IIB): Co=0.16μF, Lo=85mH