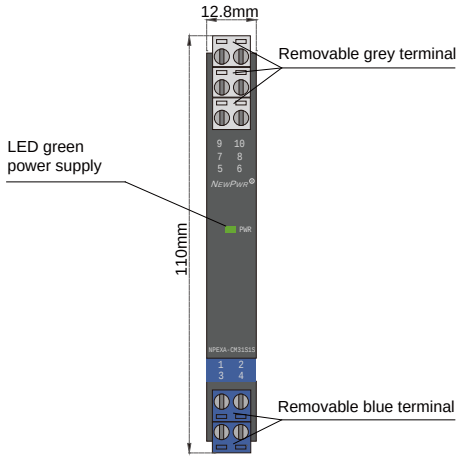
NPEXA-CM31S Single input, single output

NPEXA-CM31S1S Single input, double output

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

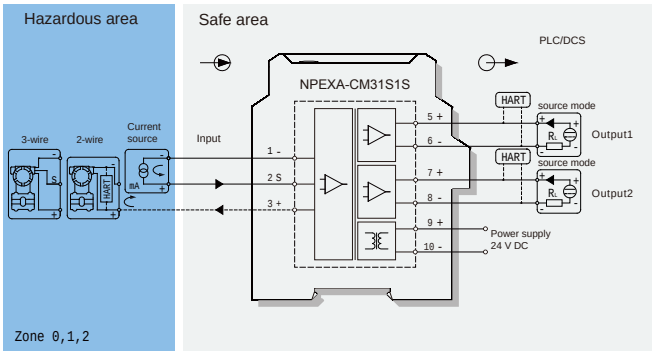
This isolated safety barrier detects loop current and converts it from a hazardous area into current（sink） signals to a safe area by isolation, and also provides transmitters with power in the hazardous area. It allows transmission of HART communication signals. The input, output, and power supply are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



Parameters

Power supply:	18V DC ~ 60V DC (Reverse power protection)
Power dissipation:	0.9W (24V, single output)
	1.0W (24V, double output)
Input signal:	4 ~ 20mA, HART
Input resistance:	approx. 75Ω
Available voltage:	open-circuit voltage ≤ 26V
	voltage: ≥ 16V at 20mA
Output signal:	4 ~ 20mA (Sink), HART
Load resistance:	R_L < [(U-3)/0.02]Ω; U: Loop power supply
Accuracy:	0.1%F.S.
Temperature drift:	30ppm/°C
Response time:	≤ 2ms
Electromagnetic compatibility:	IEC 61326-3-1
Dielectric strength:	≥ 3000V AC (intrinsically safe side / non-intrinsically safe side)
	≥ 1500V AC (Power supply /non-intrinsically safe side)
Insulation resistance:	≥ 100MΩ (Input /Output/Power supply)
Operation temperature:	-20°C ~ +60°C
Storage temperature:	-40°C ~ +80°C
Dimension:	12.8mm (W) × 110mm (H) × 117mm (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: 250V
Certified parameters (Terminals 1, 2):
Uo=5V
II C: Co=70μF
II B: Co=700μF
II A: Co=700μF
Certified parameters (Terminals 2, 3):
Uo=28V, Io=93mA, Po=651mW
II C: Co=0.058μF, Lo=2.8mH
II B: Co=0.45μF, Lo=8.4mH
II A: Co=1.50μF, Lo=22.4mH