

Communication Isolated Barrier

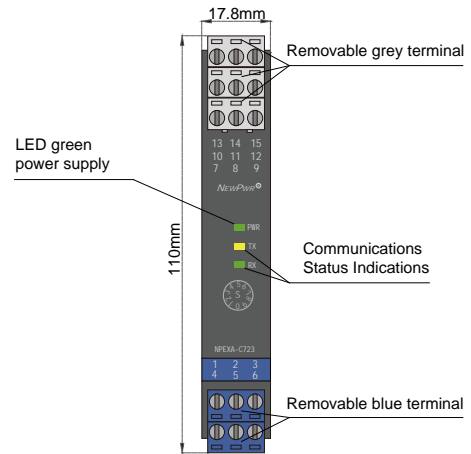
NPEXA-C723

Single input, single output

Input: RS-232

Output: RS-422

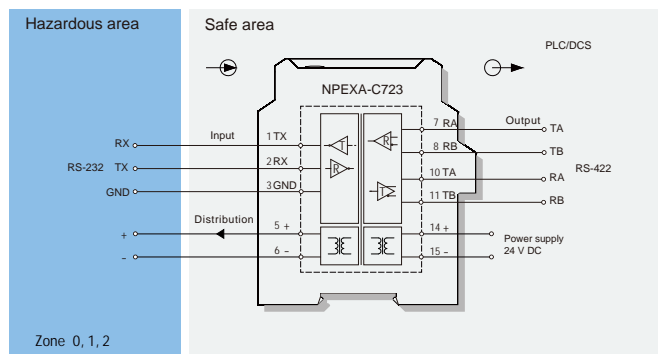
Communication input isolated barrier, it converts the RS-232 digital signals from a hazardous area into RS-422 digital signals to a safe area by isolation, and also provides transmitters with power in the hazardous area. The input, output, and power supply are galvanically isolated from each other.



Parameters

Power supply:	18V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	≤ 2W (Distribution: 8V/9V/12V, 50mA) ≤ 3.5W (Distribution: 5V/ 6V, 100mA)
Input signal:	RS-232
Control mode:	full-duplex
Output signal:	RS-422
Transmission delay:	≤ 5μs
Transmission rate:	≤ 56kbps
Distribution voltage:	Refer to rotary switch setting
Voltage tolerance:	±10%
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:	17.8mm (W) × 110mm (H) × 117mm (D)

Wiring diagram



Explosive-proof parameters

China National Quality Supervision and Test Centre for Explosion Protected Electrical Products (CQST)

Ex marking: [Ex ia Ga] IIC

Um: 250V

Certified parameters (Terminals 1, 3; 2, 3):

Uo=18.4V, Io=13mA, Po=60mW

II C: Co=0.2μF, Lo=70mH

II B: Co=1.1μF, Lo=210mH

II A: Co=4.9μF, Lo=560mH

Certified parameters (Terminals 5, 6):

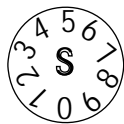
Uo=23.1V, Io=187mA, Po=1080mW

II C: Co=0.07μF, Lo=0.4mH

II B: Co=0.6μF, Lo=1.2mH

II A: Co=2.5μF, Lo=3.2mH

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