

Communication Isolated Barrier

NPEXA-C721

Single input, single output

Input: RS-232

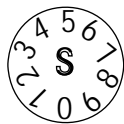
Output: RS-485

Communication input isolated barrier, it converts the RS-232 digital signals from a hazardous area into RS-485 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.

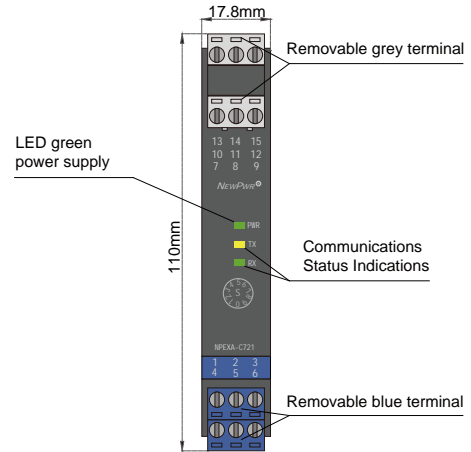
Parameters

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-485
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)

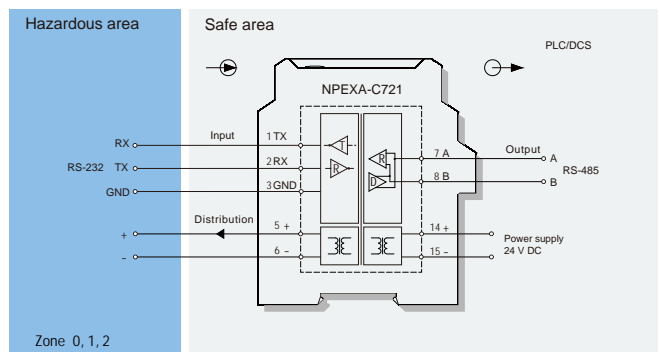
Rotary switch setting



Rotary switch	Distribution
S0	5V DC, 100mA
S1	6V DC, 100mA
S2	8V DC, 50mA
S4	9V DC, 50mA
S8	12V DC, 50mA



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