

Communication Isolated Barrier

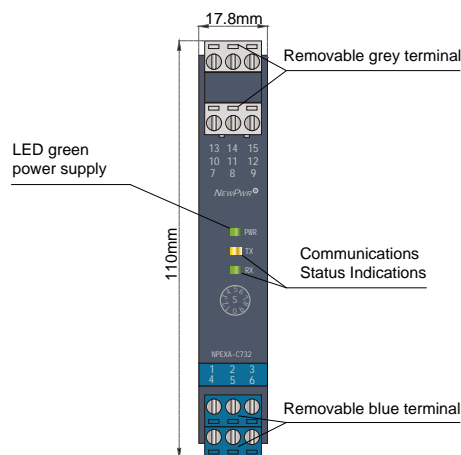
NPEXA-C732

Single input, single output

Input: RS-422

Output: RS-232

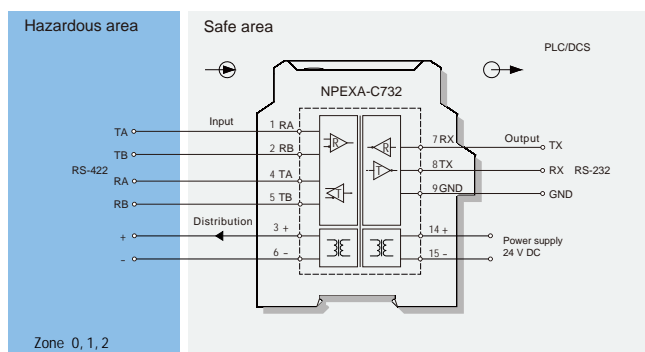
Communication input isolated barrier, it converts the RS-422 digital signals from a hazardous area into RS-232 digital signals to a safe area by isolation, and also provides transmitters with power in the hazardous area. The input, output, and power supply are galvanically isolated from each other.



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-422 |
| Control mode: | full-duplex |
| Output signal: | RS-232 |
| 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
[Ex ia Da] IIIC

Um: 250V

Certified parameters (Terminals 1, 2; 4, 5):

Uo=7.6V, Io=77mA, Po=147mW

Co=7μF, Lo=6mH

Certified parameters (Terminals 3, 6):

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

Co=0.1μF, Lo=0.34mH

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 |