

TCC-120/120I

Industrial RS-422/485 converters/repeaters with optional 2 kV isolation



- > Boost serial signal to extend transmission distance
- > Wall- or DIN-rail mounting
- > Terminal block for easy wiring
- > Power input from terminal block
- > DIP switch setting for built-in terminator (120 ohm)
- > Boost RS-422 or RS-485 signal, or convert RS-422 to RS-485
- > 2 kV isolation protection (TCC-120I)

2 kV Isolation



Introduction

The TCC-120 and TCC-120I are RS-422/485 converters/repeaters designed to extend RS-422/485 transmission distance. Both products have a superior industrial-grade design that includes DIN-rail

mounting, terminal block wiring, and an external terminal block for power. In addition, the TCC-120I supports optical isolation for system protection. The TCC-120 and TCC-120I are ideal RS-422/485 converters/repeaters for critical industrial environments.

Specifications

Serial Communication

Connectors: Terminal Block on both ends

Baudrate: 50 bps to 921.6 kbps

Signals:

RS-422/485-4w: TxD+, TxD-, RxD+, RxD-

RS-485-2w: Data+, Data-

RS-485 Data Direction Control: ADDC® (Automatic Data Direction Control)

Optical Isolation: 2 kV (TCC-120I only)

Physical Characteristics

Housing: Metal

Dimensions: 67 x 100.4 x 22 mm (2.64 x 3.93 x 0.87 in)

Weight: 148 g (0.33 lb)

Environmental Limits

Operating Temperature: -20 to 60°C (-4 to 140°F)

Storage Temperature: -20 to 75°C (-4 to 167°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Power Requirements

Source of Power Input: Power input jack

Input Voltage: 12 to 48 VDC

Input Current:

TCC-120: 65 mA @ 12 VDC

TCC-120I: 180 mA @ 12 VDC

Voltage Reversal Protection: Protects against V+/V- reversal

Overcurrent Protection: Protects against two signals shorted together

Standards and Certifications

Safety: UL 60950-1

EMC: EN 55032/24

EMI: CISPR 32, FCC Part 15B Class B

EMS:

EN 61000-4-2 (ESD): Contact: 4 kV; Air: 8 kV

EN 61000-4-3 (RS): 80 MHz to 1 GHz: 3 V/m

EN 61000-4-4 (EFT): Power: 1 kV; Signal: 0.5 kV

EN 61000-4-5 (Surge): Power: 1 kV

EN 61000-4-6 (CS): 150 kHz to 80 MHz: 3 V/m

EN 61000-4-8 (PFMF)

Green Product: RoHS, CRoHS, WEEE

MTBF (mean time between failures)

Time: 1,949,025 hrs

Standard: Telcordia (Bellcore), GB

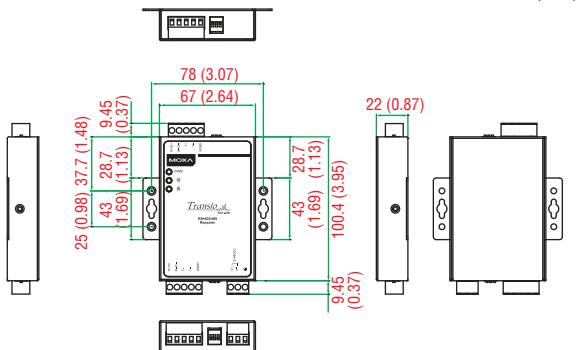
Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)



Ordering Information

Available Models

TCC-120: RS-422/485 converter/repeater

TCC-120I: RS-422/485 converter/repeater with 2 kV optical isolation

Package Checklist

- 1 TCC-120 or TCC-120I media converter
- Power wiring: DBL-JTB-10
- Mounting kit: DK35A
- Quick installation guide (printed)
- Rubber pad