# 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-1201)













## : 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 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)

ESD Protection: 15 KV for all signals Optical Isolation: 2 KV (TCC-120I only)

**Physical Characteristics** 

Housing: Aluminum

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

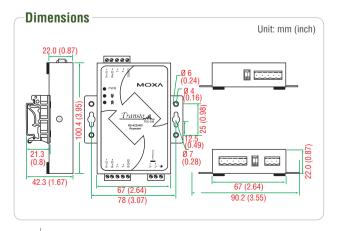
Weight: 148 ± 5 g

**Environmental Limits** 

Operating Temperature: -20 to 60°C (-4 to 140°F) Storage Temperature: -20 to 85°C (-4 to 176°F) Ambient Relative Humidity: 5 to 95% (non-condensing)

**Power Requirements** 

Source of Power Input: Power input jack



Input Voltage: 12 to 48 VDC **Power Consumption:** TCC-120: 98 mA @ 12 V TCC-120I: 234 mA @ 12 V

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

Over Current Protection: Protects against two signals shorted together

Standards and Certifications

Safety: UL 60950-1 EMC: CE, FCC

EMI: FCC Part 15 Subpart B Class B

EN 61000-4-2 (ESD) Level 2, EN 61000-4-3 (RS) Level 2, EN 61000-4-4 (EFT) Level 2, EN 61000-4-5 (Surge) Level 2, EN 61000-4-6 (CS) Level 2, EN 61000-4-8 (SFMF) Level 1 Green Product: RoHS, CRoHS, WEEE MTBF (mean time between failures)

Time: 1,949,025 hrs

Database: Telcordia (Bellcore), GB

Warrantv

Warranty Period: 5 years

**Details:** See www.moxa.com/warranty

## Ordering Information

#### **Available Models**

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

TCC-1201: RS-422/485 converter/repeater with 2 KV optical isolation

#### Package Checklist -

- 1 TCC-120 or TCC-120I media converter
- DK-35A: DIN-Rail mounting kit
- Quick installation guide (printed)
- Warranty card