# 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

## **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: Metal

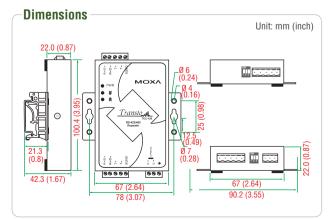
Dimensions: 67 x 100.4 x 22 mm (2.64 x 3.93 x 0.87 in) Weight: 148 ± 5 g

#### **Environmental Limits**

Operating Temperature: -20 to 60°C (-4 to 140°F) Storage Temperature: -20 to 75°C (-4 to 167°F) Ambient Relative Humidity: 5 to 95% (non-condensing)

#### Power Requirements

Source of Power Input: Power input jack



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.

#### Input Voltage: 12 to 48 VDC

**Power Consumption:** TCC-120: 65 mA @ 12 V TCC-120I: 180 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 FMS. 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 (PFMF) 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-120I: 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