

TCC-100/100I

Industrial RS-232 to RS-422/485 converters with 2 KV isolation protection



- > RS-232 to RS-422 conversion with RTS/CTS support
- > RS-232 to 2-wire or 4-wire RS-485 conversion
- > 2 KV isolation protection (TCC-100I)
- > Wall and DIN-rail mounting
- > Plug-in terminal block for easy RS-422/485 wiring
- > LED indicators for power, Tx, Rx
- > -20 to 60°C operating temperature

The certification logos shown here apply to some or all of the products in this section. Please see the **Specifications** section or Moxa's website for details.



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Media Converters > TCC-100/100I

Introduction

The TCC-100 and TCC-100I are RS-232 to RS-422/485 converters that increase networking capability by extending the RS-232 transmission distance. Both converters have a superior industrial-grade design

that includes DIN-rail mounting, terminal block wiring, external terminal block for power, and optical isolation (TCC-100I only). The TCC-100/100I are ideal solutions for converting RS-232 signals to RS-422/485 in critical industrial environments.

Specifications

RS-232 Side

Connector: DB9 female

Signals:

RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

RS-422/485 Side

Connector: Terminal Block

Signals (interface selected by DIP switch):

RS-422: TxD+, TxD-, RxD+, RxD-, GND

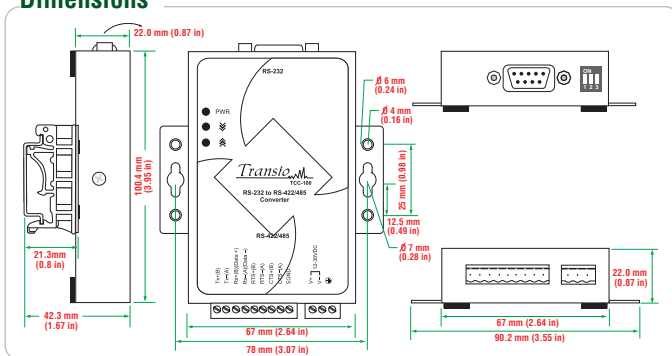
RS-485-4w: TxD+, TxD-, RxD+, RxD-, GND

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

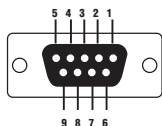
Serial Transmission

Baudrate: 300 bps to 921.6 Kbps

Dimensions



DB9 female connector



PIN	RS-232	PIN	RS-232
1	DCD	5	GND
2	TxD	6	DTR
3	RxD	7	CTS
4	DSR	8	RTS

ESD Protection: 15 KV

Optical Isolation Protection: 2 KV (TCC-100I)

Physical Characteristics

Case: Aluminum

Weight: 148 ± 5 g

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

Environmental Limits

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

Operating Humidity: 5 to 95% RH

Storage Temperature: -20 to 85°C (-14 to 176°F)

Power Requirements

Source of Input Power: RS-232 port (TxD, RTS, DTR) or power input jack

Input Voltage: 12 to 48 VDC

Power Consumption:

TCC-100: 300 mA @ 12 V

TCC-100I: 400 mA @ 12 V

Power EFT/Surge Protection: 2 KV

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

Over Current Protection: Protects against two signals shorted together

Regulatory Approvals

CE: Class B

FCC: Class B

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Ordering Information

Available Models

TCC-100: RS-232 to RS-422/485 converter

TCC-100I: RS-232 to RS-422 converter with optical isolation

Package Checklist

- TCC-100 or TCC-100I media converter
- DK-35A: DIN-rail mounting kit
- Power jack to 3-pin terminal block adaptor
- Quick Installation Guide (printed)
- Warranty Card