TCC-100/100I Series

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

> 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
> Wide temperature model available (-40 to 85°C)

The certification logos shown here apply to some or all of the products in this section. For details, see "Regulatory Approvals" under "Specifications" below.

Introduction

The TCC-100/100I series RS-232 to RS-422/485 converters 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 and TCC-100I-T only). The TCC-100/100I series converters 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, GND

RS-422/485 Side
Connector: Terminal Block
Signals:
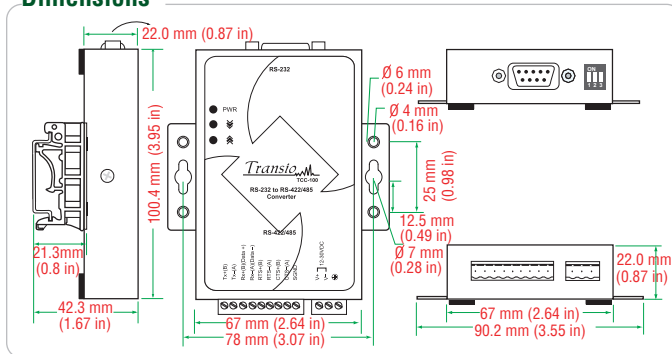(interface selected by DIP switch)
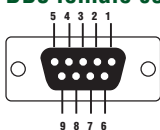RS-422: TxD+, TxD-, RxD+, RxD-, GND
RS-485-4w: TxD+, TxD-, RxD+, RxD-, GND
RS-485-2w Signals: Data+, Data-, GND

Dimensions

DB9 female connector

PIN	RS-232
1	---
2	TxD
3	RxD
4	---

PIN	RS-232
5	GND
6	---
7	CTS
8	RTS

Serial Communication
Baudrate: 50 bps to 921.6 Kbps
ESD Protection: 15 KV
Optical Isolation Protection: 2 KV (TCC-100I/100I-T)

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:
Standard Models: -20 to 60°C (-4 to 140°F)
Wide Temp. Models: -40 to 85°C (-40 to 185°F)
Operating Humidity: 5 to 95% RH
Storage Temperature: -20 to 85°C (-14 to 176°F)

Power Requirements
Source of Input Power: Power input jack
Input Voltage: 12 to 48 VDC
Power Consumption:
TCC-100/100-T: 300 mA @ 12 V
TCC-100I/100I-T: 400 mA @ 12 V
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, -20 to 60°C operating temperature

TCC-100I: RS-232 to RS-422/485 converter with optical isolation, -20 to 60°C operating temperature

TCC-100-T: RS-232 to RS-422/485 converter, -40 to 85°C operating temperature

TCC-100I-T: RS-232 to RS-422/485 converter with optical isolation, -40 to 85°C operating temperature

Package Checklist

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

MOXA®