

TCF-141 Series

3-in-1 RS-232/422/485 to ST Fiber Media Converter

Features

- Extend RS-232/422/485 transmission distance up to 20 km
- Convert RS-232/422/485 signal to ST multi-mode fiber
- Plug & Play
- Compact size
- Decrease signal interference
- Protect against electronic degradation/chemical corrosion
- Speed up to 115.2 Kbps for RS-232 and 500 Kbps for RS-422/485



Introduction

The TCF-141 series is an RS-232/422/485 to fiber optic converter that secures data transmission by using fiber optic transmission to provide immunity from EMI/RFI interference. The TCF-141 series is used for RS-232/422 point-to-point connections and RS-485 multidrop ap-

plications for transmitting a signal up to 20 km, and is the perfect solution for applications where transmission must be protected from electrical exposure, surges, lightning, or chemical corrosion.

Specifications

Communications

RS-232 Signal: Supports TxD, RxD

RS-422 Signal: Supports TxD \pm , RxD \pm

RS-485 Signal: Supports Data+, Data-

Baud Rate: 50 bps to 115.2 Kbps

Wavelength:

820 nm (TCF-141-M)

1310 nm (TCF-141-S)

Optical Loss Budget: Attenuation, 20 dB/1000 ft @ 10 MHz

Fiber Cable:

TCF-141-M 50/125, 62.5/125, or 100/140 μ m

TCF-141-S 8.3/125, 8.7/125, 9/125 or 10/125 μ m

Environment

Operating Temperature: 0 to 50°C

Humidity: 5 to 95% RH

Mechanical

Dimensions (WxDxH): 45x50x20 mm

Weight: 148 \pm 5g

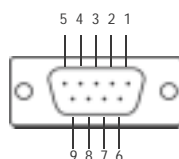
Power requirement

1A @ +5 VDC

Regulatory Approvals

CE, FCC (Part 15, Class A)

Pin Assignment



Pin	RS-232	RS-422	RS-485
1	-	TxD+	Data+
2	RxD	TxD-	Data-
3	TxD	RxD-	-
4	-	RxD+	-
5	GND	GND	GND
6	-	-	-
7	-	-	-
8	-	-	-
9	-	-	-

Ordering Information

TCF-141-M

RS-232/422/485 to ST Fiber Multi mode Optic Converter

TCF-141-S

RS-232/422/485 to ST Fiber Single mode Optic Converter

*Manual Included