TL-FC311A-3

Gigabit Single-Mode Single-Fiber Media Converter | 1 SC + 1 GE

Product Overview

TL-FC311A-3 is a gigabit single-mode single-fiber media converter with one 1000 Mbps electrical Ethernet port and one 1.25 Gbps SC optical port. It converts electrical Ethernet signals to optical signals for long-distance transmission over fiber.

Using wavelength-division multiplexing, TL-FC311A-3 transmits at 1550 nm and receives at 1310 nm over one single-mode fiber. The documented maximum transmission distance is 3 km.

TL-FC311A-3 is intended to operate with TL-FC311B-3 at the opposite end of the fiber link.

Key Features

- One gigabit SC optical port and one gigabit RJ45 Ethernet port
- Single-mode, single-fiber WDM transmission over distances up to 3 km
- 1550 nm transmit wavelength and 1310 nm receive wavelength
- A-side converter for use with the TL-FC311B-3 B-side unit

All numerical values and configuration details in this English edition are retained from the official Chinese TL-FC311A-3 product datasheet.

Technical Specifications

Parameter	TL-FC311A-3 value
Supported standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x
Interfaces	1 x 1.25 Gbps SC fiber interface 1 x 100/1000 Mbps auto-negotiating RJ45 port
Optical wavelength	Tx: 1550 nm Rx: 1310 nm
Transmission media	Network: Cat 5e or higher UTP/STP Fiber: 9/125 μm single-mode fiber
Status indicators	Fiber Link/Act, Ethernet Link/Act, PWR
Power input	5 VDC / 0.4 A; supports input up to 12 V
Dimensions	94.5 x 73 x 27 mm
Operating environment	Temperature: -20 °C to 60 °C Humidity: 10% to 90% RH, non-condensing
Storage environment	Temperature: -40 °C to 70 °C Humidity: 5% to 90% RH, non-condensing
Optical characteristics	Average transmit power: -17 to -6 dBm Receive sensitivity: -22 dBm
Per-port data rate	2 Gbps, full duplex
Packet forwarding rate	3 Mpps
MAC address table	2K entries
Internal buffer	1 Mbit