

# 10/100Mbps WDM Media Converter Datasheet

#### MODEL: TL-FC111A-20/TL-FC111B-20





### Highlights

- Complies with 802.3u 10/100Base-TX, 100Base-FX standards
- Auto-negotiation of Half-Duplex/Full-Duplex transfer mode
- Adopts WDM technology, transmitting and receiving data on one single fiber
- Extends fiber distance up to 20 km

## Overview

TL-FC111A-20 and TL-FC111B-20 are 100M media converters, each providing a 100M RJ-45 port and a 100M SC fiber port, which can convert between electrical and optical signals. Long-distance data transmission through optical fiber can be applied to commercial scenarios such as park security monitoring and wireless networking.

Take TL-FC111A-20 as an example, TL-FC111A-20 adopts WDM (Wavelength Division Multiplexing) technology, helping send and receive data at a distance of up to 20 km with only a single mode fiber, which saves half of the cable deployment cost for customers. TL-FC111A-20 transmits data at 1550 nm wavelength and receives data at 1310 nm wavelength on optical fiber. Therefore, the terminal device used in conjunction with the TL-FC111A-20 should send data at a wavelength of 1310 nm and receive data at a wavelength of 1550 nm. TP-Link media converter TL-FC111B-20 is one of the products that can cooperate with TL-FC111A-20.

Besides, these media converters can be used as standalone device (no rack required) or used with TP-Link's TL-FC1420 rack for auto MDI/MDI-X in TX port in which duplex mode is automatically negotiated.



# Specifications

#### **General Specifications**

Standards	IEEE 802.3, IEEE 802.3i, IEEE802.3u
LED	PWR, Link/Act
Connector	1 SC fiber optic; 1 RJ45 jack
Twisted-Pair	100BASE-Tx: 2-pair UTP/STP of Cat. 5 or above (≤100 m)
Fiber	9/125 µm single-mode fiber (≤20 km)
Wave Length	TL-FC111A-20: 1550 nm TX, 1310 nm RX TL-FC111B-20: 1310 nm TX, 1550 nm RX
Power	External Power Adapter: 5 V/0.6 A
Dimensions	94.5*73*27 mm

#### **Environmental and Physical Specifications**

Operating Temperature	0°C to 50°C (32°F to 122°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Operating Humidity	10% to 90% RH non-condensing
Storage Humidity	5% to 90% RH non-condensing

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