10/100Mbps WDM Media Converter Series
Datasheet

MODEL: FC111A-20/FC111B-20/FC111PB-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

- Supports 802.3af PoE Output, Max 15.4W (Only for TL-FC111PB-20)

Overview

FC111A-20, FC111B-20, and FC111PB-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 FC111A-20 as an example, 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. 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 FC111A-20 should send data at a wavelength of 1310 nm and receive data at a wavelength of 1550 nm. TP-Link media converter FC111B-20 is one of the products that can cooperate with FC111A-20.

Besides, FC111A-20 / FC111B-20 can be used as standalone device (no rack required) or used with TP-Link's 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	FC111A-20: 1550 nm TX, 1310 nm RX FC111B-20/FC111PB-20: 1310 nm TX, 1550 nm RX
Power Supply	FC111A-20 / FC111B-20：5 V/0.6 A Power Adapter FC111PB-20：48 V/0.5 A Power Adapter
Dimensions	94.5*73*27 mm
PoE Output	802.3af, Max 15.4 W (Only for FC111PB-20)

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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