

# 1000Base-BX WDM Bi-Directional SFP Module

## Datasheet

MODEL: TL-SM321A/TL-SM321B

### Highlights

- Adopts the latest standard 1000Base-BX
- Up to 20 km transmission distance in 9/125µm SMF (Single-Mode Fiber)
- Compatible with Small Form Pluggable Multi-Source Agreement (SFP-MSA)
- Supports Digital Diagnostic Monitoring (DDM)
- Supports Hot Swappable

### Overview

TP-Link's TL-SM321A and TL-SM321B are developed in accordance with the Small Form Pluggable Multi-Source Agreement (SFP-MSA). As a WDM Bi-Directional optical transceiver, TL-SM321A and TL-SM321B use an integrated LC Bi-Directional optical interface connector and the data link is up to 20 km in 9/125µm SMF (Single-Mode Fiber).

Also, TL-SM321A and TL-SM321B incorporate the Digital Diagnostic Monitoring (DDM) feature, which is compatible with SFF-8472. DDM supports real-time monitoring of the transceiver, and it also shows parameters including the transceiver current, transmitting/receiving optical power, and operating temperature.

TP-Link's TL-SM321A and TL-SM321B are used together for short-and-medium-distance fibre network in practice, and they provide fast and reliable gigabit fiber connection for switches, routers, servers, etc.

# Specifications

## General Specifications

| Normal                  | TL-SM321A                  | TL-SM321B                  |
|-------------------------|----------------------------|----------------------------|
| Wave Length             | Tx: 1550 nm<br>Rx: 1310 nm | Tx: 1310 nm<br>Rx: 1550 nm |
| Standards and Protocols | IEEE 802.3z, TCP/IP        |                            |
| Cable                   | Single-mode Fiber          |                            |
| Fiber Type              | 9/125 um Single-mode       |                            |
| Max. Cable Length       | 20 km                      |                            |
| Data Rate               | 1.25 Gbps                  |                            |
| Port Type               | LC Simplex                 |                            |
| Power Support           | 3.3 V                      |                            |
| Safety & Emission       | FCC, CE                    |                            |
| DDM                     | Yes                        |                            |
| SFP-MSA                 | Yes                        |                            |
| Hot Swappable           | Yes                        |                            |

## Environmental and Physical Specifications

|                               |                                    |
|-------------------------------|------------------------------------|
| Product Operating Temperature | 0 °C to 70 °C (32 °F to 158 °F)    |
| Storage Temperature           | -40 °C to 85 °C (-40 °F to 185 °F) |
| Operating Humidity            | 10% to 90% RH, Non-condensing      |
| Storage Humidity              | 5% to 90% RH, Non-condensing       |