## 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 $9 / 125 \mu \mathrm{~m}$ 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 9/125 $\mu \mathrm{m}$ 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 | Tx: 1310 nm |
|  | Rx: 1310 nm | 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 | FCC, CE |
| Safety \& Emission | Yes |  |
| DDM | Yes |  |
| SFP-MSA |  |  |
| Hot Swappable |  |  |

## Environmental and Physical Specifications

| Product Operating Temperature | $0^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right)$ |
| :--- | :--- |
| Storage Temperature | $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right)$ |
| Operating Humidity | $10 \%$ to $90 \% \mathrm{RH}$, Non-condensing |
| Storage Humidity | $5 \%$ to $90 \% \mathrm{RH}$, Non-condensing |

