Ōmada
by tp-link

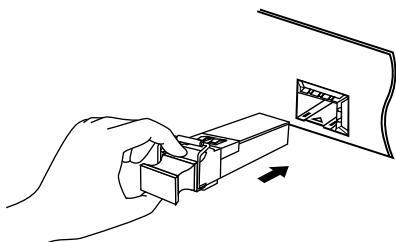## Installation Guide
1000Base-BX WDM Bi-Directional Industrial SFP Module
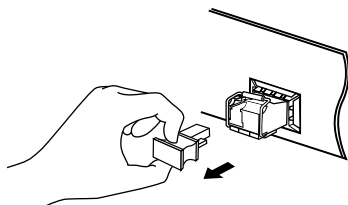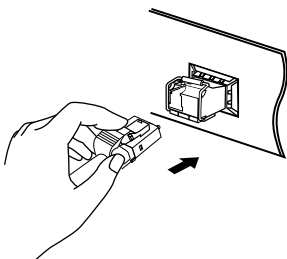
Install the SFP

1. Wear an ESD-preventive wrist or ankle strap to prevent ESD damage to the transceiver.

2. Insert the SFP into the SFP slot and firmly press it into place.
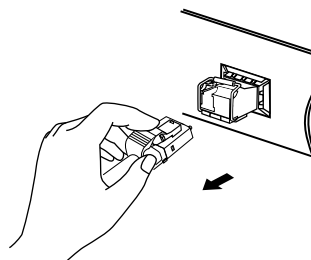

3. Remove the protective dust plug from the SFP.

4. Plug a fiber-optic cable into the SFP. Note that the SFP works without any additional configuration.
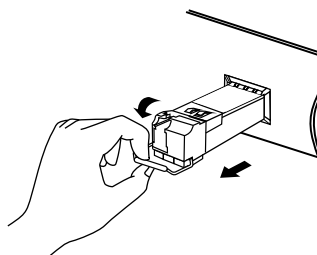

Remove the SFP

1. Wear an ESD-preventive wrist or ankle strap to prevent ESD damage to the transceiver.

2. Disconnect the network fiber-optic cable from the SFP.

3. Pull the safety latch downwards to release the SFP, and then pull it out from the slot.

4. Reinstall the protective dust plug in the SFP's optical bores and place it on antistatic mat or a static shielding bag.
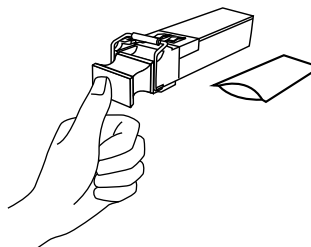
Note:
1. Do not touch the output pins on the transceiver with your hand.
2. Always keep the protective dust plug on the SFP's optical bores until you are ready to make a connection.

Caution:
DO NOT point or stare directly into the beam or into the optical port of the transceiver when it is operating, as this can injure your eyesight.

Connection

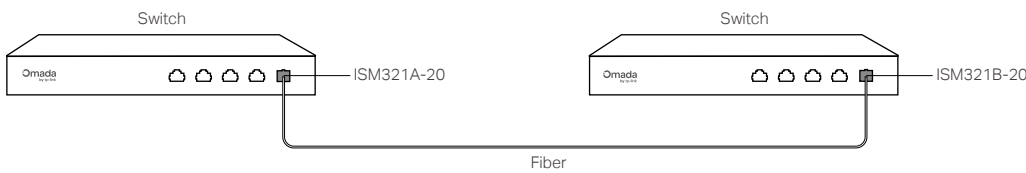Use only the ISM321A-20 & ISM321B-20 together for fast and reliable connectivity between switches.

Switch   Switch

Omada | ☁ ☁ ☁ ☁ ▢ — ISM321A-20   Omada | ☁ ☁ ☁ ☁ ▢ — ISM321B-20

Fiber

Specifications

General Specifications

Model	ISM321A-20	ISM321B-20
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	
Safety & Emission	FCC, CE	
DDM	Yes	
SFP-MSA	Yes	
Hot Swappable	Yes	
Max. Laser Output Power	0.794 mW (-1 dBm)	0.794 mW (-1 dBm)
Laser Class	Class 1	Class 1

Environmental and Physical Specifications

Product Operating Temperature	-40˚C to 85˚C (-40˚F to 185˚F)
Storage Temperature	-40˚C to 85˚C (-40˚F to 185˚F)
Operating Humidity	0% to 85% RH, Non-condensing
Storage Humidity	0% to 85% RH, Non-condensing

TP-Link Compatible Products

• TP-Link Switches with gigabit SFP Slots
• MC220L, MC420L

Note:
The SFP modules may be incompatible with other vendors' devices. We recommend that you use only TP-Link SFP modules on your TP-Link devices.

To ask questions, find answers, and communicate with TP-Link users or engineers, please join the TP-Link Community.

For technical support and other information, please visit https://support.omadanetworks.com/, or simply scan the QR code.

FC FCC compliance information statement

Product Name: 1000Base-BX WDM Bi-Directional Industrial SFP Module
Model Number: ISM321A-20/ISM321B-20
Responsible party:
TP-Link Systems Inc.
Address: 10 Mauchly, Irvine, CA 92618
Website: https://www.tp-link.com/us/
Tel: +1 626 333 0234
Fax: +1 909 527 6804
E-mail: sales.usa@tp-link.com
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
1) This device may not cause harmful interference.
2) This device must accept any interference received, including interference that may cause undesired operation.
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
We, TP-Link Systems Inc., has determined that the equipment shown as above has been shown to comply with the applicable technical standards, FCC part 15. There is no unauthorized change is made in the equipment and the equipment is properly maintained and operated.

Issue Date: 2024/12/04

EU Declaration of Conformity
TP-Link hereby declares that the device is in compliance with the essential requirements and other relevant provisions of directives 2014/30/EU, 2014/35/EU, 2011/65/EU and (EU)2015/863.
The original EU declaration of conformity may be found at https://www.tp-link.com/en/support/ce/.

UK Declaration of Conformity
TP-Link hereby declares that the device is in compliance with the essential requirements and other relevant provisions of the Electromagnetic Compatibility Regulations 2016 and Electrical Equipment (Safety) Regulations 2016.
The original UK declaration of conformity may be found at https://www.tp-link.com/support/ukca/.

Safety Information
• Keep the device away from water, fire, humidity or hot environments.
• Do not attempt to disassemble, repair, or modify the device.
• Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.
• Do not point or stare directly into the beam or into the optical port of the transceiver when it is operating, as this can injure your eyesight.
• Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation.

Продукт сертифіковано згідно с правилами системи УкрСЕПРО на відповідність вимогам нормативних документів та вимогам, що передбачені чинними законодавчими актами України.
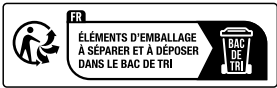
EAC UKCA

Industry Canada Statement
CAN ICES-3 (A)/NMB-3(A)

CE Mark Warning
This is a class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FR ÉLÉMENTS D'EMBALLAGE À SÉPARER ET À DÉPOSER DANS LE BAC DE TRI | BAC DE TRI

FR Cet appareil et ses accessoires se recyclent | À DÉPOSER EN MAGASIN | À DÉPOSER EN DÉCHÈTERIE | OU
Points de collecte sur www.quefairedemesdechets.fr
Privilégiez la réparation ou le don de votre appareil !

Explanation of the symbols on the product label
symbols may vary from products

Symbol	Explanation
▢	Class II equipment
⊞	Class II equipment with functional earthing
∼	Alternating current
⎓	Direct current
◈‑C‑◈	Polarity of d.c. power connector
⌂	For indoor use only
⚡	Dangerous voltage
⚡	Caution, risk of electric shock
Ⓥ Ⅰ	Energy efficiency Marking
⏚	Protective earth
⏚	Earth
⏛	Frame or chassis
⏚	Functional earthing
⚠	Caution, hot surface
⚠	Caution
📖	Operator's manual
⏻	Stand-by
⏽	"ON"/"OFF" (push-push)
⊏⊐	Fuse
⊏⊐ N	Fuse is used in neutral N
♻	RECYCLING This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment. User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.
⚠	Caution, avoid listening at high volume levels for long periods
⤵	Disconnection, all power plugs
m	Switch of mini-gap construction
μ	Switch of micro-gap construction (for US version) Switch of micro-gap /micro-disconnection construction (for other versions except US)
ε	Switch without contact gap (Semiconductor switching device)