Installation Guide

RJ45 SFP/SFP+ Module

To ask questions, find answers, and communicate with TP-Link users or engineers, please visit **https://community.tp-link.com/business** to join TP-Link Community.

For technical support and other information, please visit **https://www.tp-link.com/support/?type=smb**, or simply scan the QR code.

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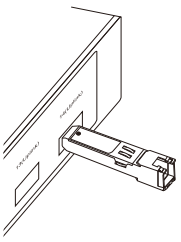
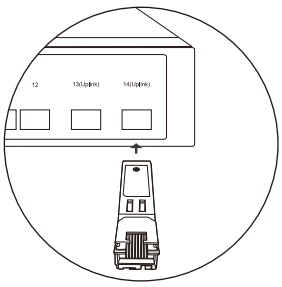
Note: Images may differ from the actual products.

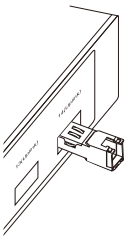
Installing the RJ45 SFP / RJ45 SFP+ Module

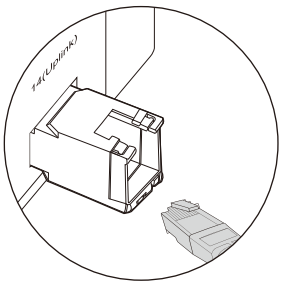
1. Lock the yellow latch into place and insert the module into an SFP / SFP+ slot with label side up.





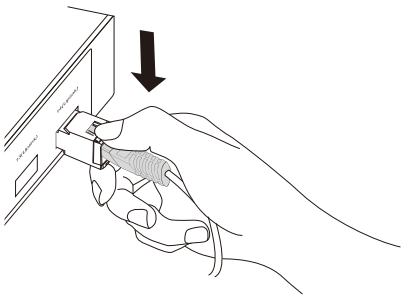
2. Gently push the module into the slot until you hear a click. Then, insert the RJ45 network cable.

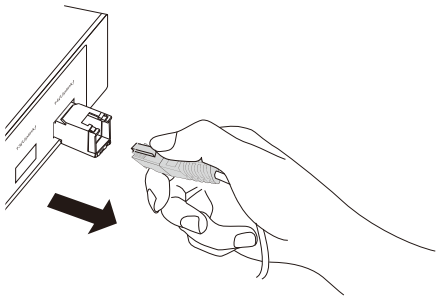




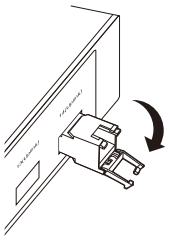
Removing the RJ45 SFP / RJ45 SFP+ Module

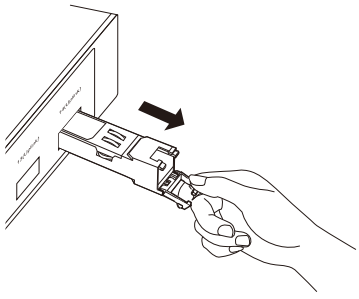
1. Press the RJ45 crystal head and pull out the cable.





2. Pull down the latch and remove the module.



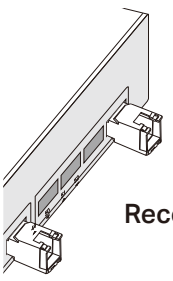


Positioning the 10G RJ45 SFP+ Modules

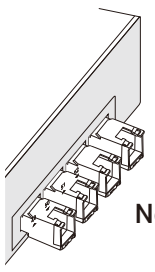
The 10G RJ45 SFP+ modules consume more power than optical modules. This may result in higher heat. To avoid overheating, it is recommended to place the modules separated by multiple optical transceivers or empty slots. When used in high temperature environments, additional cooling must be applied.

The figures below only show the recommended positioning. The actual number of modules that can be inserted depends on the switch's heat dissipation and power margin.

Scenario 1:

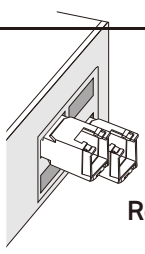


Recommended

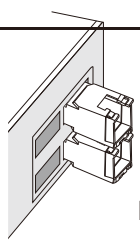


Not Recommended

Scenario 2:



Recommended



Not Recommended

Specifications

General Specifications

Model	TL-FM331	TL-FM531
Standards and Protocols	IEEE 802.3 IEEE 802.3ab SFF-8472	IEEE 802.3 IEEE 802.3u IEEE 802.3ab IEEE 802.3an IEEE 802.3bz SFF-8431 SFF-8472
MAC Interface	1000BASE-X	10Gbps/5Gbps/2.5Gbps: XFI 1000Mbps: 1000BASE-X 100Mbps: SGMII
Data Rate* (max.)	1.25 Gbps	10.3125 Gbps
Power Consumption (max.)	0.8 W	2.5 W
Cable Distance	1000BASE-T: UTP cat.5e or above (max. 100m)	100BASE-TX: UTP cat.5 or above (max. 100m) 1000BASE-T/2.5GBASE-T/ 5GBASE-T: UTP cat.5e or above (max. 100m) 10GBASE-T: UTP cat.6a or above (max. 30m)
RX_LOS	/	/
TX_Fault	/	/
TX_Disable	Yes	Yes
Hot Swappable	Yes	Yes
LLF	/	/
LFP	/	/
DDM	/	Yes (temperature and voltage)

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

Compatiblity

Model	TL-FM331	TL-FM531*
Gigabit SFP Slot (SFP Slot)	Supported	Supported***
10G SFP+ Slot (SFP+ Slot)	Supported**	Supported***

We recommend that you use only TP-Link modules on your TP-Link devices.

To check the compatible TP-Link devices of your module, please visit our website.

Note:

* TL-FM531 does not support the data rate of 10 Mbps or 100 Mbps.

** When a gigabit RJ45 SFP module is inserted into a 10G SFP+ slot, extra configuration for port data rate may be required.

***When a 10G RJ45 SFP+ module is used at 100 Mbps/1 Gbps, extra configuration for port data rate may be required. And when it is inserted into a 10 Gbps SFP+ slot and the maximum rate of the peer connection port is 5 Gbps, 2.5 Gbps, 1 Gbps, or 100 Mbps, the flow control for the 10 Gbps SFP+ slot needs to be manually enabled.

Safety Information

- Keep the device away from water, fire, humidity or hot environments.
- Do not attempt to disassemble, repair, or modify the device. If you need service, please contact us.
- Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

FCC compliance information statement

Product Name: 1000BASE-T RJ45 SFP Module/10GBASE-T RJ45 SFP+ Module
Model Number: TL-FM331/TL-FM531
Responsible party:
TP-Link USA Corporation
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 USA Corporation, 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: 2024/07/19

Industry Canada Statement

CAN ICES-3 (A)/NMB-3(A)

Explanation of the symbols on the product label

Symbols may vary from products. The label is at the bottom of the product.

Symbol	Explanation
	Class II equipment
	Class II equipment with functional earthing
	Alternating current
	Direct current
	Polarity of d.c. power connector
	For indoor use only
	Dangerous voltage
	Caution, risk of electric shock
VI	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)