

# Installation Guide

100G QSFP28 Transceiver

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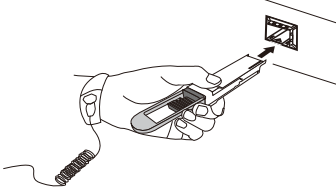


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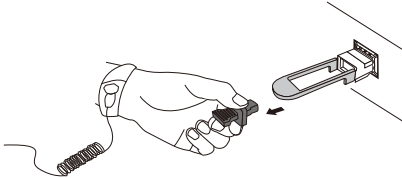
Note: The figures throughout this guide are for demonstration only. They may vary from your actual products..

## Install the Transceiver

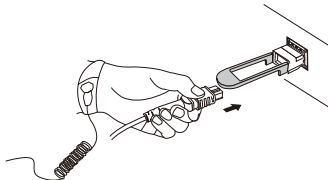
1. Wear an ESD-preventive wrist or ankle strap to prevent ESD damage to the transceiver.
2. Insert the transceiver into the slot and firmly press it into place.



3. Remove the protective dust plug from the transceiver.



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



Note:

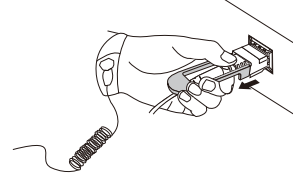
1. Do not touch the output pins on the transceiver with your hand.
2. Always keep the protective dust plug on the transceiver's optical bores until you are ready to make a connection.

Caution:

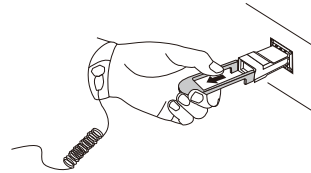
DO NOT point or stare directly into the beam or into the optical port of the transceiver when it is operating, as this can injure your eyesight.

## Remove the Transceiver

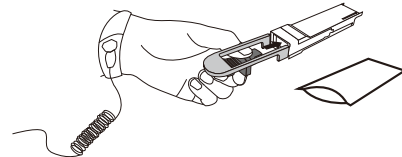
1. Wear an ESD-preventive wrist or ankle strap to prevent ESD damage to the transceiver.
2. Disconnect the network fiber-optic cable from the transceiver.



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

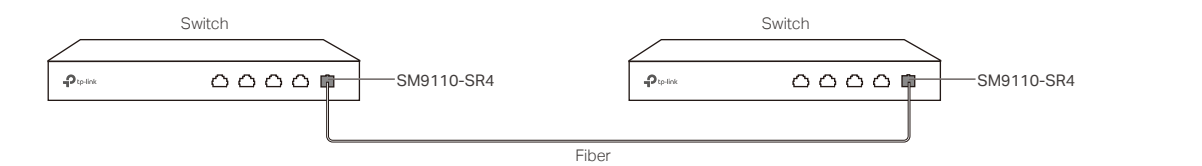


4. Reinstall the protective dust plug in the transceiver's optical bores and place it on antistatic mat or a static shielding bag.



Connection

Only use the same transceiver model for fast and reliable connectivity.  
To ensure device compatibility, we recommend that you use only TP-Link transceivers on your TP-Link devices.



Note: When plugged into a 100G QSFP28 slot, the module works at the speed of 100 Gbps; for a 40G QSFP+ slot, manually change the byte98 of page 00h from FF to 00 to make the module work at the speed of 40Gbps. Especially, when plugged into a 40G QSFP+ slot of TP-Link devices, the module can automatically downgrade the speed to 40Gbps without extra operation.

Specifications

|                         |                                                                                                            |
|-------------------------|------------------------------------------------------------------------------------------------------------|
| Model                   | SM9110-SR4                                                                                                 |
| Wave Length             | 850 nm                                                                                                     |
| Standards and Protocols | IEEE 802.3bm, IEEE 802.3ba, QSFP28 MSA, SFF-8665, SFF-8636, SFF-8436, CPRI, eCPRI                          |
| Cable                   | MMF 50/125 μm                                                                                              |
| Max. Cable Length       | 70 m (OM3), 100 m (OM4) @103.125 Gbps (4x 25.78Gbps)<br>100 m (OM3), 150 m (OM4) @41.2 Gbps (4x 10.3 Gbps) |
| Data Rate               | 103.125 Gbps (4x 25.78 Gbps)<br>41.2 Gbps (4x 10.3 Gbps)                                                   |
| Port Type               | MTP/MPO-12                                                                                                 |
| Power Support           | 3.3 V                                                                                                      |
| Safety & Emission       | FCC, CE, RoHS                                                                                              |
| DDM                     | Yes                                                                                                        |
| QSFP28 MSA              | Yes                                                                                                        |
| Hot Swappable           | Yes                                                                                                        |
| 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      | 0% to 85% RH Non-condensing                                                                                |
| Storage Humidity        | 0% to 85% RH Non-condensing                                                                                |

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.
- 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.



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/>

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                                                                                                                                                                                                                                                                                                                                                                                                                       |
|        | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|        | Fuse is used in neutral N                                                                                                                                                                                                                                                                                                                                                                                                                             |
|        | RECYCLING<br>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.<br>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)<br>Switch of micro-gap /micro-disconnection construction (for other versions except US)                                                                                                                                                                                                                                                                                                             |
| ε      | Switch without contact gap (Semiconductor switching device)                                                                                                                                                                                                                                                                                                                                                                                           |

FCC FCC compliance information statement

Product Name: Omada 100GBASE-SR4 QSFP28 Transceiver  
Model Number: SM9110-SR4  
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](mailto: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 in made in the equipment and the equipment is properly maintained and operated.

Issue Date: 2024/08/12

Industry Canada Statement

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

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.

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

