# Omada
by tp-link

# 100G QSFP28 Modules

**Datasheet**
**SM9110-SR4**
100GBASE-SR4 QSFP28 Transceiver



## Highlights

- 100GBASE-SR4 multi-mode QSFP28 Transceiver
- Supports Digital Diagnostic Monitoring (DDM)
- Up to 100 m transmission distance
- Hot-Pluggable with maximum flexibility
- Wide operating temperature
- Compatible with 100G/40G Quad Small Form-Factor Pluggable 28 (QSFP28)

## Overview

The SM9110-SR4 is designed to extend transmission distance based on ultra-fast Ethernet connectivity. It is a 100G/40GBASE-SR4 high performance 850nm multi-mode QSFP28 transceiver. It supports 100G Ethernet connection up to 100 m (OM4) and 40G Ethernet connection up to 150 m (OM4).

# Product Pictures

# Specifications

## Hardware Features & Performance

| Model | SM9110-SR4 |
|---|---|
| Form Factor | QSFP28 |
| Standards and Protocols | • IEEE 802.3bm, IEEE 802.3ba, QSFP28 MSA,<br>• SFF-8665, SFF-8636, SFF-8436,<br>• CPRI, eCPRI<br>• TCP/IP |
| Wave Length | 850 nm |
| Power Supply | 3.3 V |
| Max. Power Consumption | 1.77 W @100 Gbps<br>1.5 W @40 Gbps |
| Fiber Type | 50/125um MMF (Multimode) |
| 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 | Dual Rate 103.125 Gbps and 41.2 Gbps |
| Connector | MTP/MPO-12 |
| Transmission power | -8.4 dBm to 2.4 dBm @103.125 Gbps<br>-7.6 dBm to 2.4 dBm @41.2 Gbps |
| Transmitter Type | VCSEL 850 nm |
| Receiver Type | PIN |
| Receiver Sensitivity | <-10.3 dBm @103.125 Gbps<br><-9.5 dBm @41.2 Gbps |
| Receiver Overload | >2.4 dBm @103.125 Gbps<br>>2.4 dBm @41.2 Gbps |
| Extinction Ratio | >2 dB @103.125 Gbps<br>>3 dB @41.2 Gbps |
| Regulatory Compliance | CE, FCC, RoHS |
| Hardware Features | • DDM<br>• QSFP28 MSA<br>• Hot Swappable |
| Dimensions ( W x D x H ) | 5.04*0.72*0.34 in (128*18.35*8.5mm) |

The rows in the table above fall under the left-hand category label **General Specifications**.

## Hardware Features & Performance

| | | |
|---|---|---|
| Environmental & Physical Specifications | Operating Temperature | 0℃ to 70℃ (32℉ to 158℉) |
| | Storage Temperature | -40℃ to 85℃ (-40℉ to 185℉) |
| | Operating Humidity | 5 to 95% RH Non-condensing |
| | Storage Humidity | 5 to 95% RH Non-condensing |