



## Applications

- 100G Data Center Connectivity
- 100G Aggregation and Backplane Applications
- 100Gbase-X Ethernet

## Features

## Benefits

MSA Standard QSFP28 Form Factor

Smallest form factor transceiver among those capable of handling 100Gig traffic, to maximize the density of optical transceiver ports on the switch to offer maximum channel count and lowest cost per bit traffic for customer

IEEE 802.3bm Compliant

Provides up to 103.1Gbps data rate, interoperable with other IEEE 802.3bm compliant 100Gbase interfaces

Cisco Compatibility - Guaranteed

The 100G QSFP28 complies with MSA standards, also fully complies with OEM (such as Cisco) equipment without requiring a workaround and is truly “plug-and-play”. The 100Gig QSFP28 are verified on real Cisco switches

100GBase-SR4

Good fit for short-range multi-lane data communication and interconnection. Integrated four lanes which can operate at 25Gbps up to 70m over OM3 Multimode fiber or 100m over OM4 fiber terminated with MPO connectors. Provides reliable long life, high performance 100Gig optical links over 12-fiber parallel cable

100GBase-LR4

Uses standard Duplex LC connectors and utilizes existing structured single mode fiber to transmit 100Gig up to 10km. The module converts 4 input channels of 25Gbps data to 4 channels of LAN WDM optical signals and them multiplexes them into a single channel for 100Gbps optical transmission with the built in Mux/Demux function, the receiver side de-multiplexes a 100Gbps optical LAN WDM input into 4 optical signals.

Low Power Consumption

Less heat dissipation to meet the harshest external operating temperature conditions and provides cost savings and is environment friendly

Digital Diagnostic Monitoring

Allows access to real-time operating parameters, provides component level monitoring, fault isolation and failure prediction functions on their transceiver based applications

## Cisco Compliant 100G QSFP28

### QSFP28 100GBase-X With DMI



The Transition Networks TN-QSFP-100G Series QSFP28 optical transceivers are hot-swappable pluggables that can be installed in any QSFP28 port for 100 Gigabit Ethernet connections. The new generation of 100G transceiver solutions, which are compliant with the IEEE 802.3bm standard, offer customers a wide selection of

high-density, compact footprint and low-power 100G Ethernet connectivity options.

Application includes: data center, high-performance computing network, core network

### Features

- Hot-pluggable QSFP28 form factor
- High capacity: up to 103.1 Gbps
- QSFP28 MSA Compliant
- Single 3.3V Power Supply
- Power dissipation < 3.5 Watts
- Digital Diagnostic Monitoring
- RoHS Compliant
- 100GBase-SR4: 4 x 25 Gbps, 850nm, Multimode, 100 m over OM4, MPO
- 100GBase-LR4: 4 x 25 Gbps, WDM wavelength, Single Mode, 10 km, Duplex LC
- 100GBase-CWDM4 MSA: 4 x 25Gbps, WDM wavelength, Single Mode, 2 km, Duplex LC

### Specifications

Standards	IEEE 802.3bm SFF 8436
Dimensions	Width: 0.71" [18 mm] Depth: 2.83" [72 mm] Height: 0.33" [8.5 mm]
Power Input	3.3V
Environment	Operating: 0°C to +70°C Storage: -40°C to +85°C
Certifications	IEC 60825-1, FDA CDRH 21-CFR 1040.10 Class 1
Warranty	Lifetime

\*Transition Networks' QSFP28 modules fully comply with the Multi-Sourcing Agreement (MSA). This compliance allows our QSFP28 modules to be used in all other MSA compliant QSFP28 platforms. In addition, Transition Networks QSFP28 modules are also Compliant with all Cisco QSFP28 based routers and switches, as well as Cisco's IOS software. Transition Networks QSFP28 modules ARE NOT Cisco OEM brand modules.

### Ordering Information

#### Duplex

#### TN-QSFP-100G-SR4

QSFP28 100GBase-SR4, 850nm multimode (MPO) [100 m/328 ft. on OM4] [70 m/229 ft. on OM3] with DMI Link Budget: 2.3 dB

#### TN-QSFP-100G-LR4

QSFP28 100GBase-LR4, 1295nm, 1300nm, 1304nm, 1309nm, single mode (LC) [10 km/6.2 mi.] with DMI Link Budget: 6.3 dB

#### TN-QSFP-100G-CWDM4

QSFP28 100GBase-LR4, 1295nm, 1300nm, 1304nm, 1309nm, single mode (LC) [2 km/1.2 mi.] with DMI Link Budget: 6.3 dB