

10GBase SFP+

# TN-10GSFP-xR(x)

## 10GBase SFP+ Modules: 10GBase SFP+ MSA Compatible Duplex LC



### Features

- ▶ SFP+ Optical Transceiver with duplex LC connector
- ▶ 10G small Form-Factor Pluggable (SFP+) MSA compatible
- ▶ SFF-8472 Digital Diagnostic Function (DMI)
- ▶ Single +3.3 V Power Supply,
- ▶ Up to 10.5 Gbps bidirectional data links
- ▶ RoHS Compliant (all models)
- ▶ 0 to 70°C Operating Temperature range
- ▶ -40 to 85°C Storage Temperature range
- ▶ Class 1 Laser International Safety Standard IEC 60825 Compliant

### TN-10GSFP-SR:

- ▶ Compliant with IEEE 802.3ae 10GBASE-SR/SW
- ▶ Link Length up to 300 m with OM3 multi-mode fiber; 82 m with OM2 multi-mode fiber; 33 m with OM1 multimode fiber

### TN-10GSFP-LRx:

- ▶ Compliant with IEEE 802.3ae 10GBASE-LR/LW
- ▶ Maximum Link Length of 70 KM

### Specifications

|                |                                                                     |
|----------------|---------------------------------------------------------------------|
| Standards      | IEEE802.3ae                                                         |
| Data Rates     | 10.3 Gbps                                                           |
| Dimensions     | Width: 0.52" [13 mm]<br>Depth: 2.2" [56 mm]<br>Height: 0.33" [8 mm] |
| Power Supply   | +3.3V                                                               |
| Operating Temp | 0°C - 70°C (32°F to 158°F)                                          |
| Storage Temp   | -40°C - 85°C (-40°F to 185°F)                                       |
| Compliance     | IEC-60825; FAD 21; CFR 1040.10 and 1040.11                          |
| Warranty       | Lifetime                                                            |

### Ordering Information

#### \*TN-10GSFP-SR

10GBase-SR/SW, SFP+  
w/ Digital Diagnostics (DMI) 850nm (LC)  
[300/82/33 m; 985/269/108 ft.]  
Link Budget: 2.6 dB

#### TN-10GSFP-LR1

10GBase-LR/LW, SFP+  
w/ Digital Diagnostics (DMI) 1310nm (LC)  
[10 km/6.2 mi.] Link Budget: 6.4 dB

#### TN-10GSFP-LR2

10GBase-LR/LW, SFP+  
w/ Digital Diagnostics (DMI) 1310nm (LC)  
[20 km/12.4 mi.] Link Budget: 11.4 dB

#### TN-10GSFP-LR4

10GBase-LR/LW, SFP+  
w/ Digital Diagnostics (DMI) 1310nm (LC)  
[40 km/24.9 mi.] Link Budget: 16.5 dB

#### TN-10GSFP-LR7

10GBase-LR/LW, SFP+  
w/ Digital Diagnostics (DMI) 1310nm (LC)  
[70 km/43.4 mi.] Link Budget: 25 dB

#### TN-10GSFP-LRB11

10GBase-BX, SFP+ w/ Digital Diagnostics  
(DMI) 1270nm TX/1330nm RX SM (LC)  
[10 km/6.2 mi.] Link Budget: 9.0 dB

#### TN-10GSFP-LRB12

10GBase-BX, SFP+ w/ Digital Diagnostics  
(DMI) 1330nm TX/1270nm RX SM (LC)  
[10 km/6.2 mi.] Link Budget: 9.0 dB

#### TN-10GSFP-LRB21

10GBase-BX, SFP+ w/ Digital Diagnostics  
(DMI) 1270nm TX/1330nm RX SM (LC)  
[20 km/12.4 mi.] Link Budget: 12.0 dB

#### TN-10GSFP-LRB22

10GBase-BX, SFP+ w/ Digital Diagnostics  
(DMI) 1330nm TX/1270nm RX SM (LC)  
[20 km/12.4 mi.] Link Budget: 12.0 dB

#### TN-10GSFP-LRB41

10GBase-BX, SFP+ w/ Digital Diagnostics  
(DMI) 1270nm TX/1330nm RX SM (LC)  
[40 km/24.9 mi.] Link Budget: 16.0 dB

#### TN-10GSFP-LRB42

10GBase-BX, SFP+ w/ Digital Diagnostics  
(DMI) 1330nm TX/1270nm RX SM (LC)  
[40 km/24.9 mi.] Link Budget: 16.0 dB

#### TN-10GSFP-LRB61

10GBase-BX, SFP+ w/ Digital Diagnostics  
(DMI) 1270nm TX/1330nm RX SM (LC)  
[60 km/37.3 mi.] Link Budget: 23.0 dB

#### TN-10GSFP-LRB62

10GBase-BX, SFP+ w/ Digital Diagnostics  
(DMI) 1330nm TX/1270nm RX SM (LC)  
[60 km/37.3 mi.] Link Budget: 23.0 dB

\*Distance up to 300m on 50/125 OM3 multi-mode fiber, up to 82 m for 50/125  $\mu$ m multi-mode fiber with model.

Bandwidth 500 MHz-km at 850nm, and up to 33 m for 62.5/125  $\mu$ m multi-mode fiber with model bandwidth 200 MHzkm at 850nm.