

# TN-10GSFP-LRxM-Dxx Series

## DWDM MSA Compliant Multi-rate 1G/10GBase SFP+ Modules

### 10GBase-ER/ZR or 1000Base-LX/ZX, SFP+ With DMI Single Mode (LC)



TN-10GSFP-LR8M-D49

TN-10GSFP-LR4M-D47

### Features

- SFP+ Optical Transceiver with duplex LC connector
- 1G/10G Small Form-Factor Pluggable (SFP+) MSA compliant
- Compliant with IEEE 802.3ae 10GBase-LR/ZR
- Compliant with IEEE 802.3z 1000Base-LX/ZX
- SFF-8472 Digital Diagnostic Function (DDM)
- SFF-8431 and SFF-8432 Compliant
- Maximum Link Length of 80KM
- Single +3.3 V Power Supply
- Lower power dissipation < 1.5 Watts
- RoHS Compliant
- 0°C to 70°C Operating Temperature range
- -40°C to 85°C Storage Temperature range
- Class 1 Laser International Safety Standard IEC 60825 Compliant

### Specifications

Standards	IEEE 802.3 IEEE 802.3ae IEEE 802.3z
Dimensions	Width: 0.52" [13 mm] Depth: 2.18" [55 mm] Height: 0.33" [8 mm]
Power Input	3.3V
Environment	Operating: 0°C to 70°C Operating: -40°C to 85°C
Compliance	IEC 60825-1, FDA CDRH 21-CFR 1040.10 Class 1
Warranty	Lifetime

### Ordering Information

#### Duplex

##### TN-10GSFP-LR8M-Dxx

10GBase-ZR/1000Base-ZX, SFP+ with DMI single mode (LC) [80 km/49.7 mi.]  
Link Budget: 22.0 dB

##### TN-10GSFP-LR4M-Dxx

10GBase-ER/1000Base-LX, SFP+ with DMI single mode (LC) [40 km/24.9 mi.]  
Link Budget: 15.0 dB

#### xx = Channel

xx	Wavelength (nm)	Frequency (THz)	xx	Wavelength (nm)	Frequency (THz)
21	1560.61	192.10	41	1544.53	194.10
22	1559.76	192.20	42	1543.73	194.20
23	1558.98	192.30	43	1542.94	194.30
24	1558.17	192.40	44	1542.14	194.40
25	1557.36	192.50	45	1541.35	194.50
26	1556.55	192.60	46	1540.56	194.60
27	1555.75	192.70	47	1539.77	194.70
28	1554.94	192.80	48	1538.98	194.80
29	1554.13	192.90	49	1538.19	194.90
30	1553.33	193.00	50	1537.40	195.00
31	1552.52	193.10	51	1536.61	195.10
32	1551.73	193.20	52	1535.82	195.20
33	1550.92	193.30	53	1535.04	195.30
34	1550.12	196.40	54	1534.25	195.40
35	1549.32	193.50	55	1533.47	195.50
36	1548.51	193.60	56	1532.68	195.60
37	1547.72	193.70	57	1531.90	195.70
38	1546.92	193.80	58	1531.12	195.80
39	1546.12	193.90	59	1530.33	195.90
40	1545.32	194.00	60	1529.55	196.00