

TN-SFP-BC55-x Series

SFP with Integrated Network Monitoring Capability

OTDR SFP, 1000Base-LX/100Base-FX Single Fiber Single Mode



The TN-SFP-BC55-x is an intelligent device in Small Form Factor (SFP) with integrated OTDR (Optical Time-Domain Reflectometer) function. As a part of Transition Networks Smart SFP family, it offers the simple way of assessment or monitoring the status of the physical fiber infrastructure. The deployment of this capability could be in a single-ended manner, or both ends as required.

Transition Networks switches, NIDs and Media converters* have started to offer the function of monitoring and reporting the fiber fault by simply plugging in the TN-SFP-BC55-x optical transceivers. Whenever a disconnect or breakage occurs in the fiber connected to one of the Transition Networks devices equipped with TN-SFP-BC55-x, the device can automatically alert the loss of signal or distance to the fault to the IT administrator.

Applications include: Gigabit Ethernet Switches & Routers, Fast Ethernet Switches and Routers, Business Class Service, and Center Office Cross-Connect.

Major Benefits include: small footprint with integrated network monitoring, single wavelength operation in legacy and UPC connector networks, physical layer fault detection, distributed remote fiber monitoring, and no additional special equipment is necessary.

Features

- 1.25Gbps/125Mbps bi-directional data link
- Compliant with IEEE 802.3z 1000Base-LX & IEEE 802.3 100Base-FX
- Single +3.3V Power Supply
- RoHS Compliant (all models)
- MSA Compliant
- Integrated OTDR (Optical Time-Domain Reflectometer) function
- Integrated Reflection Immune Operation – Any Network Type
- SFF-8472 Digital Diagnostic Function (DDMI)
- 55 dB Dynamic Range for the OTDR
- Dead Zone of 30 meters or less
- Resolution of 10 meters or Better
- Accuracy of 50 meters or Better
- Class 1 Laser International Safety Standard IEC 60825 Compliant

Specifications

Standards	IEEE 802.3 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: -20°C to +70°C Storage: -40°C to +85°C
Compliance	IEC 60825-1, FDA CDRH 21-CFR 1040.10 Class 1
Warranty	1 Year



Ordering Information

Simplex

TN-SFP-BC55-I

SFP w/OTDR 1000Base-LX/100Base-FX
1550nm single fiber single mode (LC)
[40km/24.9mi.] Link Budget: 20.0dB

TN-SFP-BC55

SFP w/ Reflection Immune Operation,
1000Base-LX/100Base-FX, 1550nm single fiber
single mode (SC) [40km/24.9mi.]
Link Budget: 20.0dB

Note: Other wavelengths, Duplex, and other distance options are available upon request.

*Note: Supported by S4224 and S3290 Series currently