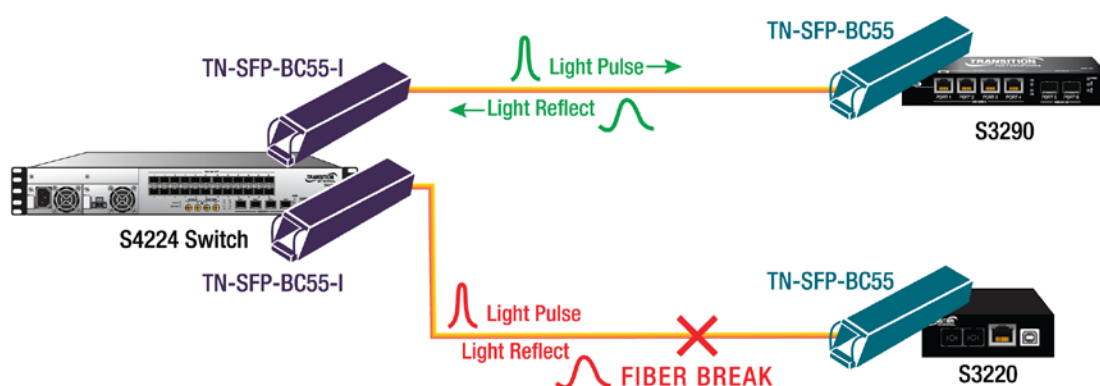


## TN-SFP-BCxxxx: OTDR Smart SFP

Feb 2016

### Network Diagram



### Value Proposition

In fiber connection applications, the fiber switch or demarcation device may incorporate the smart technologies of monitoring the throughput, Packet Loss and Latency to ensure the network service level, but these devices have little or no capability to provide the information regarding the physical fiber infrastructure through which they are connected. In the case of fiber damage or breakage within the fiber infrastructure, locating the fiber problem is often costly and complex for the network operator. When using the TN-SFP-BCxxx Smart SFP with Transition Networks' compatible devices, the fiber infrastructure is monitored while also automatically determining and locating faults within the infrastructure. These features provide a cost-effective solution that minimizes troubleshooting and recovery activities, as well as the time to repair, of the infrastructure.

### Key Differentiators

- Physical layer fiber fault determination and location
- Detect and locate the distance to the fiber break automatically
- Switch from data transmit to OTDR mode without manual intervention
- Transmit and receive on the same wavelength
- Full-time observation on single end or both ends of the fiber link
- Free Technical Support

### Product Description

The TN-SFP-BCxxxx is an intelligent Small Form-Factor Pluggable (SFP) with integrated Optical Time Domain Reflectometer (OTDR) capability. As a part of Transition Networks' Smart SFP family, it offers a simple way of assessing or monitoring the status of the physical optic infrastructure and measures the distance to a fiber breakage.

## Applications

- Physical layer fiber network monitoring
- Fast Ethernet or Gigabit Ethernet fiber network maintenance
- Detect fiber tapping for optical network security applications

Features	Benefits
MSA Compliant	Achieves the uniformity in equipment and allows interoperability in a variety of switches and converters.
Gigabit/Fast Ethernet Dual speed	Allows for connectivity to either the legacy 100Base-FX or 1000Base-LX fiber links
Single Fiber	Doubles the optical fiber plant capacity for data transport
Integrated OTDR	Ability to detect, locate and report the optical fiber faults; the SFP automatically switches to OTDR mode upon the disruption or failure to connect of the data link
Reflection Immune Operation	Resolves self-reflection from an open connector or other reflectors and increases the probability of detection
Link Birth Certificate	Save the cost per install, easily record the link length during installation
Read OTDR through SNMP, Web and CLI	Allows the network administrator to gain the OTDR data remotely, through standard protocol from the Network Management System
Automatically detect, store, and report	Reduce the operating cost and Mean-Time-To-Repair (MTTR), quickly dispatching the right team for the right problem

## Ordering Information

### TN-SFP-BC55-I

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

### TN-SFP-BC55

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