Small Form-Factor Pluggable 3.125 Gigabit Ethernet 1554.94 nm DWDM

Description

The 3.125 Gagabit Ethernet 1554.94 nm DWDM (SFP) is a single-mode fiber SFP that plugs into ADTRAN Gigabit Ethernet modules designed to accept SFPs. The SFP provides a dual optical interface to a 3.125 Gigabit Ethernet physical interface.

Installed into an appropriate module, the SFP provides a 3.125 Gigabit Ethernet tributary interface to the supporting system.

⚠ CAUTION

This SFP should not be used in applications requiring standard Gigabit (1000Base) Ethernet services.

This SFP is designed for use in Dense Wavelength Division Multiplexing (DWDM) applications.

NOTE

Non-DWDM lasers cannot be used in DWDM applications.

The following features are supported on the SFP:

- Data rate: 3.125 Gbps
- Optical connectors: LC
- Transmit wavelength: 1554.94 nm
- Receive wavelength: 1200 to 1620 nm
- Transmit center wavelength spacing: 100 GHz
- Optical distance: 80 km maximum

Operational Specifications

- Optical Specifications:
  - Optical transmit level: 0 dBm to +4 dBm
  - Optical receive level: –5 dBm to –29 dBm
- Extended Environmental Support:
  - Operational temperature range: –40°C to +85°C
  - Storage temperature range: –40°C to +85°C
  - Relative humidity to 95%, noncondensing

Installation

To install the SFP into an appropriate module, complete the following steps:

1. Inspect the SFP. If damaged, file a claim with the carrier and then contact ADTRAN Customer Support.

⚠ CAUTION

Do not remove the protective end cap from the SFP until the fiber optic cable is ready to be connected.

2. Insert the SFP into the SFP cage on the module. Ensure the manufacturer's label on the SFP is facing upward for correct installation.
3. Slide the SFP all the way into the receptacle until there is an audible "click".

NOTE

The latch on the SFP is used to remove the SFP from the cage on the circuit card.

COMPLIANCE

⚠ CAUTION

- Electrostatic Discharge (ESD) can damage electronic modules. When handling modules, wear an antistatic discharge wrist strap to prevent damage to electronic components. Place modules in antistatic packing material when transporting or storing. When working on modules, always place them on an approved antistatic mat that is electrically grounded.
- The SFP meets or exceeds all the applicable requirements of NEBS, Telcordia GR-63-CORE, and GR-1089-CORE. The SFP is intended for deployment in Central Office type facilities, EEEs, EECs, and locations where the NEC applies (for example, Customer Premises). The SFP is to be installed in ADTRAN products in Restricted Access Locations only, and installed by trained service personnel.

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This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by ADTRAN could void the user's authority to operate this equipment.

⚠ CAUTION

- Per GR-1089-CORE, the ADTRAN system in which the SFP is being deployed is designed and intended for installation as part of a Common Bonding Network (CBN). The ADTRAN system in which the SFP is being deployed is not designed nor intended for installation as part of an Isolated Bonding Network (IBN).
- Per GR-1089-CORE Section 9, the SFP does not have an internal DC connection between battery return and frame ground. The SFP can be installed in a DC-I (isolated) or DC-C (common) installation. For installations where other cards or the host system have internal connections between battery return and frame ground, the system would be intended for deployment only in a DC-C installation.

⚠ CAUTION

The ADTRAN system chassis frame ground terminal must be connected to a reliable earth ground to ensure that the metal enclosure of the SFP is properly grounded via the backplane connector.

⚠ CAUTION

The SFP is a Class 1 Laser Product and complies with the Laser Safety requirements of FDA 21CFR 1040.10 and 1040.11, and EN60825-1 and -2. The SFP is NRTL listed and CB Certified to all applicable American and European safety standards.
For continued compliance with the above laser safety standards, only approved Class 1 modules from our approved vendor list, located on the ADTRAN website, should be installed in ADTRAN products.

NOTE

The Gigabit port(s) are optical and therefore are not classified as any type of port as defined in Appendix B of GR-1089-CORE, Issue 4.

The SFP is designed to meet the following environmental classes:

- ETSI EN 300 019-1-1 “Classification of environmental conditions; Storage,” Class 1.2
- ETSI EN 300 019-1-2 “Classification of environmental conditions; Transportation,” Class 2.3
- ETSI EN 300 019-1-3 “Classification of environmental conditions; Stationary use at weather-protected locations,” Class 3.3

The equipment is designed to function without degradation during exposure to all test severities per Class 3.3

The 3.125 Gagabit Ethernet 1554.94 nm DWDM Small Form-Factor Pluggable meets EU RoHS Directive 2002/95/EC and/or applicable exemptions. Refer to www.adtran.com for further information on RoHS/WEEE.

NOTE

This SFP is compliant with SFF-8472 “Digital Diagnostics Monitoring Interface for Optical Transceivers,” Revision 9.3.
This SFP is compliant with the Small Form-Factor Pluggable (SFP) Multi-Source Agreement (MSA).

CAUTION!
SUBJECT TO ELECTROSTATIC DAMAGE OR DECREASE IN RELIABILITY.
HANDLING PRECAUTIONS REQUIRED.

PRICING AND AVAILABILITY 800.827.0807
TECHNICAL SUPPORT 800.726.8663
RETURN FOR REPAIR 256.963.8722