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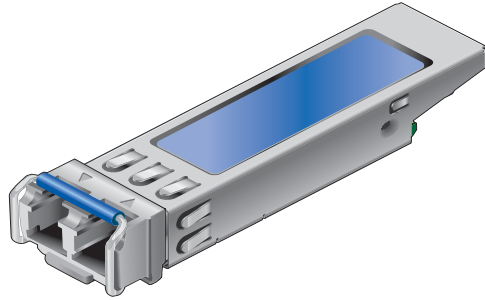
Go to: <https://supportforums.adtran.com/welcome>

Registration is required.

ADTRAN offers training courses on our products, including customized training and courses taught at our facilities or at customer sites.

For inquiries, go to: <http://adtran.com/training>

The following documents provide additional information for this product:
SFP, XFP, SFP+ Compatibility Matrix and Engineering Guide



DESCRIPTION

The Small Form-Factor Pluggable (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 Gigabit Ethernet physical interface.

Installed into an appropriate module, the SFP provides a 1.25 Gigabit Ethernet interface to the supporting system.

NOTE

If the SFP is installed in a GigE 4-Port Line Module (P/N: 1187550E1), ensure that Auto Negotiation is disabled on the line module to ensure proper operation.

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

FEATURES

The following features are supported on the SFP:

- 1000BASE-EX DWDM
- Data rate: 1.25 Gbps
- LC optical connectors
- Transmit Wavelength: 1539.77 nm
- Receive Wavelength: 1200 to 1620 nm
- Optical distance: 120 km maximum

CAUTION

Due to compliance certification requirements, only use SFPs supplied by ADTRAN with the host module. ADTRAN cannot certify system integrity with other SFPs.

INSTALLATION

Before installation, inspect the SFP. If damage has occurred during shipping, file a claim with the carrier, and then contact ADTRAN Customer Support. For more information, refer to "Warranty".

Installation Guidelines

The following are guidelines for this installation.

- The latch on the SFP is for removal only. When removing the SFP, rotate the latch away from the SFP. The SFP should slide easily out of the cage.
- It is recommended that the connector plug remain on whenever the transceiver optical fiber connector is not inserted.

Installation Steps

To install the SFP, complete the following steps:

1. Insert the SFP into the SFP cage on the circuit board of the host module with the latch handle facing outward. Slide the SFP all the way into the cage.
2. Exert adequate pressure to ensure the SFP is completely seated in the SFP cage. There should be an audible "click" when the SFP is completely seated.
3. Do not remove the connector plug until the optical fiber connection is made.
4. Continue the installation and turn-up of the host module.

SPECIFICATIONS

- Optical Specifications:
 - ◆ Optical transmit level: 0 dBm to +4 dBm
 - ◆ Optical receive level: -33.0 to -5.0 dBm minimum
 - ◆ Optical Budget: 33 dB
 - ◆ Optical connectors: LC
- Extended Environmental Support:
 - ◆ Operational temperature range: -40°C to +65°C
 - ◆ Storage temperature range: -40°C to +85°C
 - ◆ Relative humidity to 95%, noncondensing

SAFETY AND REGULATORY COMPLIANCE

WARNING

Read all warnings and cautions before installing or servicing this equipment.

CAUTION

The product 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.

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.
- This product meets or exceeds all the applicable requirements of NEBS, Telcordia GR-63-CORE, and GR-1089-CORE. This product is intended for deployment in Central Office type facilities, EEEs, EECs, and locations where the NEC applies (for example, Customer Premises). This product is to be installed in ADTRAN products in Restricted Access Locations only, and installed by trained service personnel.
- Per GR-1089-CORE the ADTRAN system that this product is being deployed in is designed and intended for installation as part of a Common Bonding Network (CBN). The ADTRAN system that this product is being deployed in is not designed nor intended for installation as part of an Isolated Bonding Network (IBN).
- Per GR-1089-CORE Section 9, this product does not have an internal DC connection between battery return and frame ground. This product 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.
- The ADTRAN system chassis frame ground terminal must be connected to a reliable earth ground to ensure that the metal enclosure of this product is properly grounded via the backplane connector.

NOTE

- The Gigabit Ethernet port(s) are optical and therefore are not classified as any type of port as defined in Appendix B of GR-1089-CORE.
- This product is designed to be deployed in GR-3108-CORE environmental class 1, 2, and 3.
- This product is compliant with SFF-8472 *Digital Diagnostics Monitoring Interface for Optical Transceivers*, Revision 9.3.
- This product is compliant with the *Small Form-Factor Pluggable (SFP) Multi-Source Agreement (MSA)*.

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.

This product is designed to meet the following environmental classes:

- GR-3108-CORE Environmental Classes 1, 2, and 3
- 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.

This product meets EU RoHS Directive 2002/95/EC and/or applicable exemptions. Refer to www.adtran.com for further information on RoHS/WEEE.

Warranty: ADTRAN will replace or repair this product within the warranty period if it does not meet its published specifications or fails while in service. Warranty information can be found online at www.adtran.com/warranty.



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