



DESCRIPTION

The Small Form-Factor Pluggable Gigabit Ethernet, Single-Mode (SFPGS) plugs into ADTRAN GigE host modules designed to accept SFPs. The SFPGS provides an optical interface to the GigE physical interface. Installed into an appropriate host module, the SFPGS provides a Gigabit Ethernet interface to the supporting system.

The transmit wavelength range is 1,270-1,355 nm, and the receive wavelength range is 1,265-1,580 nm.

NOTE

To ensure compatibility, refer to the documentation provided with the host module.

The features supported on the SFPGS are as follows:

- ◆ 1000Base-LX 1310 nm, single-mode, 2 fiber operation
- ◆ Optical distance: 10 km maximum

CAUTION

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

INSTALLATION

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

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

1. Inspect the SFPGS. If damaged, file a claim with the carrier and then contact ADTRAN Customer Service.
2. Remove the safety cap from the optical connectors of the SFPGS.

3. Insert the SFPGS into the receptacle on the circuit board of the host module, with the manufacturer's label facing outward. Slide the SFPGS all the way into the receptacle.
4. Use thumb and forefinger to squeeze the receptacle and SFPGS together, to ensure a proper connection.

NOTE

The latch on the SFP is for removal only.

5. Continue the installation and turn-up of the host module using the instructions in the Job Aid provided with that module, or using the Installation and Maintenance Practice (I&M), available online at www.adtran.com.

PROVISIONING

The SFPGS is not directly provisionable. To provision the SFPGS, access the menu system of the host module. Refer to the "Provisioning" section of the Job Aid or I&M provided with the host module for provisioning details.

SPECIFICATIONS

Specifications for the SFPGS are as follows:

- ◆ Optical Specifications:
 - ◇ Optical transmit level: -3 dBm to -9.5 dBm
 - ◇ Optical receive level: -3 dBm to -20 dBm
 - ◇ Link power budget: 10.5 dB
 - ◇ Optical connectors: LC
- ◆ Extended Environmental Support:
 - ◇ Operational temperature range: -40°C to +85°C
 - ◇ Storage temperature range: -40°C to +100°C
 - ◇ Relative humidity to 95%, noncondensing

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 Small Form-Factor Pluggable Gigabit Ethernet, Single-Mode is NRTL Listed to the applicable UL standards. The SFPGS meets or exceeds all the applicable requirements of NEBS, Telcordia GR-63-CORE, and GR-1089-CORE. The SFPGS is intended for deployment in Central Office type facilities, EEEs, EECs, and locations where the NEC applies (for example, Customer Premises). Install the SFPGS in an ADTRAN product located in a restricted access location.

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 that the SFP is being deployed in is designed and intended for installation as part of a Common Bonding Network (CBN). The ADTRAN system that the SFP 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, the Small Form-Factor Pluggable Gigabit Ethernet, Single-Mode does not have an internal DC connection between battery return and frame ground. The SFPGS 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 an earth ground to ensure that the metal enclosure of the SFPGS is properly grounded via the backplane connector.

CAUTION

The Small Form-Factor Pluggable Gigabit Ethernet, Single-Mode is a Class 1 Laser Product and complies with the Laser Safety requirements of FDA 21 CFR 1040.11, and EN60825-1 and EN60825-2. The SFPGS is NRTL Listed and CB Certified to all applicable American and European safety standards.

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 Issue 4.

The SFPGS 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.

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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