

Small Form-Factor Pluggable 1310 nm TX/ 1490 nm RX, 20km

CLEI: VAUIAL9P__ Product P/N: 1442120G2

Issue Date: June 2014 Document P/N: 61442120G2-22C

job**Aid**

Documentation for ADTRAN Carrier Networks products is available for viewing and download directly from the ADTRAN Support Community website.

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

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

Registration is required.

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DESCRIPTION

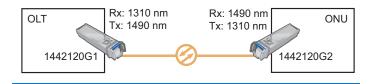
The Small Form-Factor Pluggable (SFP) Gigabit Ethernet, Single-Fiber is a bidirectional SFP that installs into the Optical Loop Termination (OLT) designed to accept SFPs. The SFP provides a single optical interface to the GigE physical interface. Installed into an appropriate OLT, the SFP provides a Gigabit Ethernet interface to the supporting system.

NOTE

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

NOTICE

In a deployment consisting of an OLT with a 1442120G1 SFP installed; the Optical Network Unit (ONU) should have a complementary 1442120G2 SFP installed.



FEATURES

The following features are supported on the SFP:

- 1000Base-LX 1310 nm Transmitter
- 1000Base-LX 1490 nm Receiver
- Optical distance: 20 km maximum

▲ CAUTION

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

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.
- 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:
 - Transmit wavelength: 1310 nm
 - Receive wavelength: 1490 nm
 - ♦ Optical transmit level: -8 dBm to -3 dBm
 - ♦ Optical receive level: -22 dBm to -3 dBm
 - ♦ Optical distance: 20 km
 - Optical connectors: LC
- Extended Environmental Support:
 - ♦ Operational temperature range: -40°C to +85°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

- 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 is a Class 1 Laser that complies with FDA 21 CFR 1040.10 and 1040.11 and IEC 60825-1 and -2. The product is NRTL Listed and CB Certified to all applicable American and European safety standards.
- 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).
- This product is intended to operate in ambient temperatures up to 65°C.
- 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, & 3.
- This product is NRTL Listed to the applicable UL Standards. The product is designed to meet the applicable requirements of Telcordia GR-63-CORE, GR-1089-CORE and GR-3108-CORE.
- This product has been evaluated to international safety standards EN 60950-1, AS/NZS 60950.1, and IEC 60950-1. This product meets the requirements for CE marking under the EMC Directive and Low Voltage Directive. Standards used to demonstrate Compliance are EN 300 386 and EN 60950.

• This product is intended for deployment in CO Type Facilities, EECs and locations where the NEC applies (ex. Customer Premises). This product is to be installed and serviced by trained and qualified Service Personnel only. Install this product in a restricted access location by trained Service Personnel only.

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:

- 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 <u>www.adtran.com</u> 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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