

Description

The 10 Gig XGS-PON Optical Line Termination (OLT) Class E1 SFP+ is a single-mode fiber SFP+. The SFP+ provides a single optical interface to a physical interface. You can use it with a 9.953 Gbps passive optical network (PON) OLT module. The SFP+ provides a 9.953 Gbps XGS-PON interface to the supporting system.

The SFP+ is configured with an L-band 9.953 Gbps downstream transmitter and a O-band 9.953 Gbps upstream receiver, which work in a TDM configuration.

Description	P/N
SFP+, 10 Gb XGS-PON E1 OLT	1442544F3
SFP+, 10 Gb XGS-PON E1 OLT, BABA-compliant	1442544F3BD



CAUTION

Due to compliance certification requirements, use only pluggable optics supplied by Adtran. Adtran cannot certify system integrity with other pluggable optics.

Features

- ODN Class E1 transceiver
- Data rate: 9.953 Gbps
- Optical receive wavelength: 1270 nm
- Optical transmit wavelength: 1577 nm
- Optical distance: up to 40 km
- FDA 21 CFR 1040.10 and IEC 60825-1 Class I laser safety compliant
- Meets the EU RoHS Directive
- Hot pluggable

- Applications:
 - XGS-PON access networks
 - Fiber to the Premises (FTTP)
 - Fiber to the Building (FTTB)
 - Fiber to the Curb (FTTC)

Installation

Before you install the equipment, inspect the SFP+ for damage. If you notice damage from shipping, file a claim with the carrier and then contact Adtran. For more information, see [Warranty](#).



CAUTION

Do not remove the protective dust cover from the SFP+ until you are ready to connect the fiber optic cable.



NOTE

SFP+ orientation varies depending on the port orientation on the host module.

To install the SFP+ into an appropriate module:

1. Insert the SFP+ into the SFP+ port on the module.
2. Slide the SFP+ all the way into the SFP+ port until you hear an audible click.
3. Remove the protective dust cover from the SFP+ and the fiber optic cable.
4. Insert the fiber optic cable into the SFP+.
5. Continue the installation and turn-up of the host module by using the instructions in the Quick Start Guide provided with the module or other available system-level documentation. For more information, see [Documentation](#).



NOTE

Only use the latch on the SFP+ when removing it from the host module. When removing the SFP+, rotate the latch away from the SFP+. It should easily slide out of the port.



WARNING

A warning indicates a hazard that, if not avoided, could result in death, injury, or serious property damage.



CAUTION

A caution indicates a hazard that, if not avoided, could result in service interruption, damage to the equipment, or minor property damage.



NOTE

A note highlights additional, but important, information or features.

Specifications

• General

- Module type: SFP+
- Media type: Fiber
 - Single-mode
 - SC connector
- Signal data rate: 9.953 Gbps
- Distance: up to 40 km
- Not compatible with SFP+ MSA

• Optical

- Transmitter
 - Laser diode type: EML
 - Transmit wavelength: 1577 nm
 - Tx power: +6.0 to +9.0 dBm
 - Spectral width: 1.0 nm
 - Side mode suppression ratio: 30.0 dB
 - Extinction ratio: 8.2 dB
- Receiver
 - Type: APD
 - Central wavelength: 1270 nm
 - Receiver sensitivity: -30.0 dBm
 - Receiver overload: -9.0 dBm

• Environmental

- Protected equipment severe environment, outdoor
 - System ambient operational temperature range: -40°C to +70°C (-40°F to 158°F)
 - Storage temperature range: -40°C to +85°C (-40°F to 185°F)
 - Relative humidity: 5% to 95%, non-condensing

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Documentation

You can view Adtran documentation on the Adtran Support Community website after you register: <https://supportcommunity.adtran.com>.

Adtran Pluggable Optics Compatibility Matrix, an online tool, provides additional information for this product: <http://www.adtran.com/pluggableoptics>.

Training

Adtran offers training courses for our products, including customized training and courses taught at our facilities or at customer sites. For inquiries, go to: <https://adtran.com/training>.

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. For more information, go to <https://www.adtran.com/warranty>.

Safety and Regulatory

English



WARNING!

Read all warnings, cautions, notes, and installation instructions before you install or service this equipment.



CAUTION!

This product is a Class 1 Laser module that complies with FDA 21 CFR 1040.10, FDA 21 CFR 1040.11, and IEC 60825-1.



CAUTION!

- Electrostatic Discharge (ESD) can damage electronic modules. When you handle modules, wear an antistatic discharge wrist strap to prevent damage to electronic components. Place modules in antistatic packing material when you transport or store them. When working on modules, always place them on an approved antistatic mat that is electrically grounded.
- This product and the host system are designed and intended for installation as part of either a common bonding network (CBN) or isolated bonding network (IBN).
- The product outer case is electrically isolated from other circuits. You can use this product in systems that are installed either in a DC-I (isolated) or DC-C (common) configuration. For systems where other installed modules or the host system itself have internal connections between battery return and frame ground, you can deploy the system in a DC-C configuration only.
- If the host system has a protective earth (PE) terminal, ensure that the PE terminal of the host system is connected to PE to properly ground exposed metal, such as front panels and optical modules, on the product.



NOTE

- This product is designed to be deployed in GR-3108-CORE environmental Class 1, 2, or 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 was evaluated to applicable international standards and meets the requirements for CE marking.
- You can deploy this product only in specific locations, such as central offices and outside plant cabinets.
- Only trained and qualified service personnel can install and service this product.
- 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 voids the warranty.
- This product is designed to meet these environmental classes:
 - ETSI EN 300 019-2-1 "Classification of environmental conditions, Storage," Class 1.2
 - ETSI EN 300 019-2-2 "Classification of environmental conditions, Transportation," Class 2.3
 - ETSI EN 300 019-2-3 "Classification of environmental conditions, Stationary use at weather protected locations," Class 3.4
- This product is designed to function without degradation during exposure to all test severities per Class 3.4.
- This product meets EU RoHS Directive. For further information about RoHS and WEEE, go to: www.adtran.com.

Français



AVERTISSEMENT!

Lisez tous les avertissements, précautions, notes et instructions d'installation avant d'installer ou d'utiliser les équipements.

Deutsch



WARNUNG!

Lesen Sie alle Warnungen, Hinweise, Bemerkungen und Installationsanleitungen bevor Sie diese Geräte installieren oder bedienen.



CAUTION!

SUBJECT TO ELECTROSTATIC DAMAGE
OR DECREASE IN RELIABILITY
HANDLING PRECAUTIONS REQUIRED

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