

# GPON SFP

2.5 G/1.25 G, 20 km

P/N: 11361050F2

## Quick Start

### Description

The Gigabit Passive Optical Network (GPON) Small Form-Factor Pluggable (SFP) is a single-mode fiber SFP that plugs into an Adtran optical interface designed to accept SFPs. The SFP provides a single optical interface to a physical interface, and is intended for use with a GPON module.

This SFP is designed for use in GPON ONU applications. When installed into an appropriate module, the SFP provides a GPON interface to the supporting system.

This SFP has a Digital Diagnostic Monitoring (DDM) function with internal calibration.

#### CAUTION!

- Due to compliance certification requirements, use only SFPs supplied by Adtran. Adtran cannot certify system integrity with other SFPs.
- This device should not be used in central office applications.

### Installation

Before installing the equipment, 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 the warranty.

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

#### CAUTION!

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

#### NOTE

Orientation of the SFP will vary depending on the host module.

1. Insert the SFP into the SFP port on the host module.
2. Slide the SFP all the way into the SFP port until there is 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 using the instructions in the Quick Start provided with the module or other system-level documentation available online at [www.adtran.com](http://www.adtran.com).

#### NOTE

The latch on the SFP is for removal only. When removing the SFP, rotate the latch away from the SFP, the SFP should easily slide out of the port.

#### WARNING!

WARNING indicates a hazard which, if not avoided, could result in death, injury or serious property damage.

#### CAUTION!

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

#### NOTE

NOTES inform the user of additional, but important, information or features.

## Operational Specifications

### General

- Module type: SFP
- Fiber/Copper: Fiber
  - ◆ SM/MM: Single Mode Fiber
  - ◆ Single/Dual-fiber: Single-fiber
- Optical Connector: SC/APC
- Applications: GPON ONU
- Distance: 20 km
- Digital Diagnostic Monitoring: SFF8472 Compliant

### Optical

- Transmitter
  - ◆ Laser Diode Type: DFB
  - ◆ Tx Central Wavelength: 1310 nm
  - ◆ Tx Optical Power: +0.5 dBm to +5.0 dBm
  - ◆ SMSR: >35 dB
  - ◆ Extinction Ratio: >10 dB
- Receiver
  - ◆ Rx Type: APD/TIA
  - ◆ Rx Central wavelength: 1490 nm
  - ◆ Rx Optical Power: -8.0 dBm to -28.0 dBm
  - ◆ Receiver Overload: -8 dBm
  - ◆ Receiver Sensitivity: -28 dBm

### Environmental

- Protected Equipment Environment (Outdoor)
  - ◆ System Ambient Operational temperature range: -40°C to +60°C
  - ◆ Storage temperature range: -40°C to +85°C
  - ◆ Relative humidity to 5 to 95%, non-condensing

## SAFETY AND REGULATORY

### English



#### WARNING!

Read all warnings, cautions, notes and installation instructions before installing or servicing this equipment.



#### CAUTION!

This product contains or uses a Class 1 Laser module that complies with FDA 21 CFR 1040.10, 1040.11 and IEC 60825-1. For continued compliance with the above standards, only approved Class 1 laser modules from an Adtran approved vendor list (located on the Adtran website) should be installed in this product. Adtran cannot certify system integrity with other laser modules.



#### CAUTION!

- Electrostatic Discharge (ESD) can damage electronic devices. When handling devices, wear an antistatic discharge wrist strap to prevent damage to electronic components. Place devices in antistatic packing material when transporting or storing. When installing or maintaining, always place devices on an approved antistatic mat that is electrically grounded.
- This product and the host system are designed and intended for installation as part of a Common Bonding Network (CBN). This product and the host system are not designed nor intended for installation as part of an Isolated Bonding Network (IBN).
- This product's outer case may not be "electrically isolated" from other circuits. As a result, this product can only be used in systems that are installed in a DC-C (common) configuration.
- If the host system has a protective earth (PE) terminal, the PE terminal of the host system must be connected to protective earth (PE) to ensure that the exposed metal (i.e., front panels, optical modules) on the product is properly grounded.



#### NOTE

- This product is designed to be deployed in GR-3108-CORE environmental class 1 as defined in GR-3108-CORE.
- 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 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 meets EU RoHS Directive. Refer to [www.adtran.com](http://www.adtran.com) for further information on RoHS/WEEE.

## Français

### **AVERTISSEMENT!**

Lisez toutes les mentions de danger et de prudence et les remarques, ainsi que la notice d'installation, avant d'effectuer l'installation ou l'entretien de cet équipement.

### **ATTENTION!**

Ce produit contient ou utilise un module Laser de classe 1 qui est conforme avec la FDA 21 CFR 1040.10, 1040.11 et IEC 60825-1. Pour le maintien de la conformité avec les normes ci-dessus, seulement approuvé classe 1 modules laser d'un Adtran approuvés liste des fournisseurs (situé sur le site Adtran) doit être installé dans ce produit. Adtran ne peut certifier l'intégrité du système avec d'autres modules laser.

### **ATTENTION!**

- Les décharges électrostatiques (ESD) peuvent endommager les appareils électroniques. Lors de la manipulation des appareils, portez un bracelet antistatique, afin d'éviter d'endommager les composants électroniques. Mettez les appareils dans un emballage antistatique, lors de leur transport ou de leur entreposage. Lors de leur installation ou de leur entretien, les appareils doivent toujours être placés sur un tapis antistatique homologué, qui est mis à terre.
- Ce produit et le système hôte sont conçus et destinés à être installés dans le cadre d'un réseau Bonding commun (CBN). Ce produit et le système hôte ne sont pas conçus, ni destinés à être installés dans le cadre d'un réseau de Bonding isolé (IBN).
- Le boîtier extérieur de ce produit pourrait ne pas être " isolé galvaniquement " des autres circuits. Donc ce produit peut être utilisé uniquement dans des systèmes dotés d'une configuration de retour commun d'alimentation en courant continu (c.c.-C).
- Si le système hôte est doté d'une borne de mise à la terre de protection (PE), la borne PE du système hôte doit être connectée à la mise à terre de protection (PE), afin d'assurer que les parties métalliques à découvert (panneaux frontaux, modules optiques) du produit soient correctement mis à terre.

### **REMARQUE**

Ce produit est conforme à la directive européenne RoHS. Reportez-vous à [www.adtran.com](http://www.adtran.com) pour de plus amples renseignements sur RoHS/WEEE.

## Deutsch

### **WARNUNG!**

Lesen Sie alle Warnungen, Gefahrenhinweise, Anmerkungen und Installationsanweisungen bevor Sie dieses Gerät installieren oder warten.

### **VORSICHT!**

Das Produkt enthält oder verwendet Klasse 1 Laser-Module, die mit FDA 21 CFR 1040.10, 1040.11 und IEC 60825-1 erfüllen. Damit die obigen Richtlinien auch in Zukunft eingehalten werden können, dürfen ausschließlich Klasse 1 Lasermodule von einem von Adtran zugelassenen Anbieter in dem Produkt installiert werden (siehe Website von Adtran). Adtran garantiert nicht für die Systemintegrität bei anderen Lasermodulen.

### **VORSICHT!**

- Elektrostatische Entladung (ESD) kann elektronische Geräte beschädigen. Tragen Sie bei der Handhabung von Geräten ein Antistatik-Armband mit Erdungskabel, um Schäden an elektronischen Komponenten zu vermeiden. Während des Transports oder bei der Lagerung müssen Geräte in antistatischem Verpackungsmaterial gelegt werden. Geräte bei der Installation oder Wartung immer auf einer zugelassenen antistatischen, elektrisch geerdeten Matte stellen.
- Dieses Produkt und das Host-System ist entworfen und für die Installation als Teil einer gemeinsamen Bonding Network (CBN) vorgesehen. Dieses Produkt und das Host-System ist nicht für die Installation als Teil eines isolierten Bonding Network (IBN) bestimmt sind.
- Das äußere Gehäuse dieses Produktes mag nicht von anderen Stromkreisen "elektrisch isoliert" sein. Deshalb kann dieses Produkt nur in Systemen verwendet werden, die in einer gemeinsamen Gleichstrom-Rücklauf-Konfiguration installiert sind.
- Falls das Host-System über einen Schutzleiteranschluss (PE) verfügt, muss der PE-Anschluss des Host-Systems mit dem Schutzleiteranschluss (PE) verbunden werden, um sicherzustellen, dass das freiliegende Metall (d. h. Frontblenden, Optikmodule) am Produkt ordnungsgemäß geerdet ist.

### **HINWEIS**

Dieses Produkt erfüllt die EU RoHS Richtlinie. Sie [www.adtran.com](http://www.adtran.com) für ausführlichere Informationen zu RoHS/WEEE.

Documentation for Adtran Network Solutions products is available for viewing and download directly from the Adtran Support Community website.

Go to: <https://supportcommunity.adtran.com>

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 online documents and resources provide additional information for this product:

Adtran Pluggable Optics Compatibility Matrix  
(online tool, go to: <http://www.adtran.com/pluggableoptics>)

**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](http://www.adtran.com/warranty).

**Trademarks:** Brand names and product names included in this document are trademarks, registered trademarks, or trade names of their respective holders.

Copyright © 2024 Adtran, Inc. All Rights Reserved.



**ADTRAN CUSTOMER CARE:**  
From within the U.S. 1.888.423.8726  
From outside the U.S. +1 256.963.8716  
**PRICING AND AVAILABILITY 1.800.827.0807**

