

XFP**XFP NG-PON2 OLT TWDM CTMP**

Quick Start

Description

This document supports the following XFPs:

P/N	Channel	Center Wavelength	Color Code
1442549F1C	CH1	1596.34 nm	Blue
1442549F2C	CH2	1597.19 nm	Green
1442549F3C	CH3	1598.04 nm	Orange
1442549F4C	CH4	1598.89 nm	Red

The NG-PON2 LOT TWDM CTMP Small Form-factor Pluggable (XFP) is a single-mode fiber XFP. It plugs into an ADTRAN optical interface that is designed to accept XFPs. The XFP provides a single optical interface to a physical interface, and is intended for use with a 9.95328 Gbps Passive Optical Network (PON) Optical Line Termination (OLT) module. Installed into an appropriate module, the XFP provides a 9.95328 Gbps PON interface to the supporting system.

The XFP is configured with an L-band 9.95328 Gbps downstream transmitter and a C-band 9.95328 Gbps upstream receiver, which work in a TDM configuration. The XFP is designed to support up to 32 subscribers over distances of up to 20 km in the ODN. It is FDA 21CFR1040.10 and IEC 60825-1 Class I laser safety compliant and meets the EEC Directive 2002/95/EC for RoHS compliance.

The following features are supported on these XFPs:

- Data rate: 9.95328 Gbps
- Optical Center Receive Wavelength: 1524-1544 nm
- Optical distance: 20 km maximum
- Hot Pluggable

Applications:

- NG-PON2 Access networks
- FTTH
- FTTB
- FTTC

Due to compliance certification requirements, use only XFPs supplied by ADTRAN. ADTRAN cannot certify system integrity with other XFPs.

Installation

Before installing the equipment, inspect the XFP. 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.

Installation Steps

To install the XFP into an appropriate device, complete the following steps:

**NOTE**

Do not remove the protective end cap from the XFP until the fiber optic cable is ready to be connected.

1. Insert the XFP into the XFP cage on the module. Ensuring that the latch on the XFP is facing upward, slide the XFP all the way into the XFP cage until there is an audible “click”.

**NOTE**

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

**NOTICE**

Do not remove the protective end cap until the optical fiber connection is made. Ensure that you keep the protective end cap on whenever the transceiver optical fiber connector is not inserted.

2. Continue the installation and turn-up of the host module using the instructions in the Job Aid provided with the module or other system-level documentation available online at www.adtran.com.

Specifications

Specifications for this XFP are as follows:

- Optical
 - ◆ Optical transmit level: +5.0 dBm to +8.0 dBm
 - ◆ Optical receive level: -28 dBm to -8 dBm
 - ◆ Optical Connectors: Single SC receptacle
 - ◆ Compatible with XFP MSA
- Environmental
 - ◆ Operational Case Temperature Range: 0°C to +70°C
 - ◆ Storage Temperature Range: -40°C to +85°C
 - ◆ Relative Humidity - Storage: 0% to 95%, noncondensing
 - ◆ Relative Humidity - Operational: 50% to 85%, noncondensing

SAFETY AND REGULATORY

English



WARNING!

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



CAUTION!

This product is a Class 1 Laser module that complies with FDA 21 CFR 1040.10 and 1040.11 and IEC 60825-1. This product is NRTL Listed and CB Certified to all applicable American and European safety standards. For continued compliance with the above standards, install only ADTRAN-approved Class 1 Laser Modules in ADTRAN products. For a list of ADTRAN-approved SFPs and XFPs, see <http://www.adtran.com/SFP>. ADTRAN cannot certify system integrity with other laser modules.



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 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 is designed and intended only for deployment in a DC-C (common) bonding and grounding configuration. This product is not intended or designed for deployment in a DC-I (isolated) bonding and grounding system.
- The chassis frame ground terminal must be connected to an earth ground to ensure that the exposed metal (i.e., front panels, SFP/XFP modules) on the product is properly grounded via the backplane connector.



NOTE

- This product is designed to be deployed in GR-3108-CORE environmental Class 1 or 2.
- This product is NRTL Listed to the applicable UL Standards. The product is designed to meet the applicable requirements of Telcordia GR-63-CORE and GR-1089-CORE.
- This product has also 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 Central Office type facilities, EEEs, EECs, and locations where the NEC applies (for example, Customer Premises).
- 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 300 019-2-1 "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 3.1E
 - This product is designed to function without degradation during exposure to all test severities per Class 3.3 of ETSI EN 300 019-1-3.
 - This product meets EU RoHS Directive. Refer to www.adtran.com for further information on RoHS/WEEE.

Français

Lisez tous les avertissements et mises en garde avant l'installation de cet équipement ou la réalisation de toute opération de maintenance.



ATTENTION!

Ce produit est un module laser de classe 1 qui est conforme à la FDA 21 CFR 1040.10 et 1040.11 et IEC 60825-1. Ce produit est NRTL et Certifié CB à toutes les normes de sécurité applicables américains et européens. Pour maintenir la conformité avec les normes ci-dessus, installer des modules laser de classe 1 ne ADTRAN approuvés dans les produits d'ADTRAN. Pour une liste des SFP et XFP ADTRAN approuvés, voir <http://www.adtran.com/SFP>. ADTRAN ne peut certifier l'intégrité du système avec d'autres modules laser.



ATTENTION!

- L'ESD (décharge électrostatique) peut endommager les modules électroniques. Lors de la manipulation des modules, portez un bracelet de décharge antistatique pour éviter d'endommager les composants électroniques. Placez les modules dans un emballage antistatique lors du transport ou du stockage. Lorsque vous travaillez sur les modules, placez-les toujours sur un tapis antistatique certifié muni d'un branchement de mise à la terre.
- La borne de terre de châssis doit être connecté à une prise de terre pour assurer que le métal exposé (tels que les panneaux avant, des modules SFP / XFP) sur le produit est correctement mis à la terre via le connecteur de fond de panier.
- Ce produit est conforme à la directive européenne RoHS. Reportez-vous à www.adtran.com pour de plus amples renseignements sur RoHS/WEEE.

Deutsch

Lesen Sie sich alle Warn- und Sicherheitshinweise durch, bevor Sie dieses Gerät installieren oder warten.

VORSICHT!

Dieses Produkt ist ein Klasse 1 Laser -Modul, das mit der FDA 21 CFR 1040.10 und 1040.11 und IEC 60825-1 entspricht. Dieses Produkt wurde NRTL gelistet und CB Certified allen geltenden amerikanischen und europäischen Sicherheitsstandards. Für die ständige Einhaltung der oben genannten Normen, installieren Sie nur ADTRAN zugelassene Klasse 1 Lasermodule in ADTRAN Produkte. Eine Liste der ADTRAN zugelassene SFPs und XFPs finden Sie unter <http://www.adtran.com/SFP>. ADTRAN kann nicht die Unversehrtheit des Netzes mit anderen Laser-Module zertifizieren.

VORSICHT!

- Elektrostatische Entladung (ESD) können elektronische Baugruppen beschädigt werden. Beim Umgang mit Modulen , tragen Sie eine Antistatikarmband, um Schäden an elektronischen Bauteilen zu verhindern. Ort -Module in antistatische Verpackung, beim Transport oder Lagerung. Bei Arbeiten an Modulen immer legen Sie sie auf einer zugelassenen antistatische Unterlage, die elektrisch geerdet ist.
- Der Fahrgestellrahmen Erdanschluß muß zu einer Erde verbunden werden, um sicherzustellen, dass das freiliegende Metall (dh Frontplatten, SFP / XFP-Module) auf dem Produkt richtig über den Backplane-Anschluss geerdet ist.
- Dieses Produkt erfüllt die EU RoHS Richtlinie. Bitte besuchen Sie 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://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 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.

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