

Quick Start

DESCRIPTION

The ADTRAN 10G Copper Small Form-factor Pluggable (SFP+) RJ-45 (10 Gig SFP+) plugs into the appropriate ADTRAN Ethernet module to provide a 10 GBase-T interface over an RJ-45 type copper connector. This transceiver module has an integrated duplex data link for bidirectional communication over copper cable. It is used for high speed communication links that require 10 Gigabit Ethernet over Cat 6a/7 cable.

FEATURES

The following features are supported on the 10 Gig SFP+:

- 10 GBase-T compliant
- Auto-negotiation per IEEE 802.3 TM: 2008
- Uses Cat 6a/7 Ethernet cable for up to 30 Meters (98.4 feet)

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

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 10 Gig SFP+ is for removal only. When removing the 10 Gig SFP+, rotate the latch away from the 10 Gig SFP+. The 10 Gig SFP+ should slide easily out of the cage.
- It is recommended that the protective dust cover remain on whenever the transceiver optical fiber connector is not inserted.

Installation Steps

To install the 10 Gig SFP+, complete the following steps:

1. Insert the 10 Gig SFP+ into the SFP cage on the circuit board of the host module with the latch handle facing outward. Slide the 10 Gig SFP+ all the way into the cage.
2. Exert adequate pressure to ensure the 10 Gig SFP+ is completely seated in the 10 Gig SFP+ cage.
3. Continue the installation and turn-up of the host module.

SPECIFICATIONS

- General
 - ◆ Module type: SFP+
 - ◆ Media Type: Copper
 - ◆ Signal Data Rate: Up to 10.3 Gbps
 - ◆ Connector: RJ-45
 - ◆ Distance:
 - 10 Gigabit Ethernet over Cat 6a/7 cable up to 30 meters (98.4 feet)
 - 100/1000 Base-T up to 100 meters (328.1 feet) using Cat 5e or better
- Environmental
 - ◆ Controlled Protected Environment (Inside)
 - Operational temperature range: -5°C to +55°C
 - Storage temperature range: -40°C to +85°C
 - Relative Humidity: 5 to 85%

SAFETY AND REGULATORY



WARNING!

- Read all warnings and cautions before installing or servicing this
- The SFP port is classified as Type 2 or Type 4, as defined in Appendix B of GR-1089-CORE, and is suitable for connection to intra-building, unexposed, wiring or cabling only. Do not metallically connect this port to interfaces which connect to exposed or Outside Plant (OSP) wiring or cabling. The SFP port is designed for use as intra-building interface only (Type 2 or Type 4 port as described in GR-1089-CORE) and requires isolation from exposed OSP cabling. The addition of Primary Protectors is not sufficient protection in order to connect the interface metallically to OSP wiring.



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 system is designed and intended for installation as part of a Common Bonding Network (CBN). This system is not designed nor intended for installation as part of an Isolated Bonding Network (IBN).
- 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) configuration. 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 configuration.
- 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

- Install this product in a Restricted Access Location. This product is intended to be installed and serviced by qualified Service Personnel only.
- This product is designed to be deployed in GR-3108-CORE environmental Class 1.
- 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 for further information on RoHS/WEEE.

- This product is intended for deployment in Central Office type facilities, EEEs, EECs, and locations where the NEC applies (ex., Customer Premises). This product is to be installed by trained Service Personnel in a restricted access location.

FRANÇAIS



AVERTISSEMENT!

- Lisez tous les avertissements et mises en garde avant l'installation de cet équipement ou la réalisation de toute opération de maintenance.
- Exigences locales peuvent s'appliquer.



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.
- Ce système est conçu et prévu pour une installation intégrée à un réseau de masse maillé. Ce système n'est pas conçu ni prévu pour une installation intégrée à un réseau de masse isolé (IBN).
- Ce produit ne dispose pas d'une connexion c.c. interne entre le courant de retour de la batterie et la masse du châssis. Ce produit peut être installé en configuration c.c.-I (isolé) ou c.c.-C (commun). Pour les installations où d'autres cartes ou le système hôte ont des connexions internes entre le retour de la batterie et la masse du châssis, le système ne peut être déployé que dans une configuration c.c.-C.
- 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.



REMARQUE

Ce produit est conforme à la directive européenne RoHS. Reportez-vous à www.adtran.com pour de plus amples renseignements sur RoHS.

DEUTSCH



WARNUNG!

- Lesen Sie sich alle Warn- und Sicherheitshinweise durch, bevor Sie das Gerät installieren oder Servicehandlungen vornehmen.
- Es gelten vorhandene lokale Anforderungen



VORSICHT!

- Elektrostatische Entladung können elektronische Module beschädigen. Tragen Sie beim Umgang mit Modulen ein Erdungsarmband, um Schäden an den elektronischen Komponenten zu vermeiden. Transportieren oder lagern Sie Module in antistatischem Verpackungsmaterial. Bei der Arbeit an den Modulen, achten Sie darauf, diese stets auf antistatische, elektrisch geerdete Matten zu legen.
- Das System ist entwickelt und vorgesehen für die Installation als Teil einer gemeinsamen Potentialausgleichsanlage. Das System ist nicht zur Installation als Teil einer isolierten Potentialausgleichsanlage vorgesehen.
- Dieses Produkt hat keinen internen Gleichstromanschluss zwischen Batterierücknahme und Gehäusemasse. Dieses Produkt kann in einer DC-I (isoliert) oder DC-C (emeinsam) Konfiguration installiert werden. Bei Installationen, bei denen andere Karten oder das Host -System interne Verbindungen zwischen der Batterierückleitung und der Gehäusemasse haben, würde das System nur für den Einsatz in einer DC-C-Konfiguration eingesetzt werden.
- 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.



HINWEIS

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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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

