

Quick Start

ADTRAN Pluggable Optics

SFP

DS3 Circuit Emulation

November 2018
61442316F1-13B

P/N: 1442316F1

DESCRIPTION

The SFP DS3 Circuit Emulation provides a DS3 75-Ohm unbalanced interface through a mini coax to transport a DS3 signal mapped into an STS-1 across an Ethernet network by using the CEP (RFC 4842) protocol.

FEATURES

The DS3 Circuit Emulation provides Gigabit Ethernet at the 20-pin electrical interface.

CAUTION!

Due to compliance certification requirements, use only SFPs supplied by ADTRAN with the host module. ADTRAN cannot certify system integrity with other pluggable optics.

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.

Installation Steps

To install the SFP, complete the following steps:

CAUTION!

Do not remove the protective dust cover until the Coaxial RF cable connection is made.

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 until an audible "click" is heard.
2. Exert adequate pressure to ensure the SFP is completely seated in the SFP cage.



NOTE

Refer to the table below for the supported cables available to be purchased separately from ADTRAN.

| Part Number | Description |
|-------------|-------------------------------------|
| 1442317F1 | CABLE DS3 DIN 1.0/2.3 to BNC-F 6 FT |
| 1442317F2 | CABLE DS3 DIN 1.0 to DIN 1.0 1 M |

3. Remove the protective dust cover and connect the cables.
4. Continue the installation and turn-up of the host module.

SPECIFICATIONS

■ General

- ◆ Module type: SFP
- ◆ Media Type: Copper
- ◆ Signal data rate: 1.25 Gb/s
- ◆ Applications: Migration and integration of transport in packet switching networks
- ◆ Distance: Maximum 450 Feet

■ Environmental

- ◆ Protected Equipment Environment (Outside)
- ◆ Operational temperature range: -40°C to +65°C
- ◆ Case temperature hardened range: -40°C to +85°C
- ◆ Storage temperature range: -40°C to +85°C
- ◆ Relative humidity: 5 to 95%

SAFETY AND REGULATORY

ENGLISH



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 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 (for example, 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.
- The DS3 port(s) of this product can be populated with copper Ethernet SFPs. A copper Ethernet port is classified as DS3 as defined in Appendix B of GR-1089-CORE and is suitable for connection to intra-building or unexposed wiring or cabling only. Do not metallically connect the DS3 port(s) to interfaces which connect to the OSP or to the OSP wiring. The copper Ethernet port(s) is/are designed for use as intra-building interface only (DS3 ports as described in GR-1089-CORE) and require isolation from exposed OSP cabling. The addition of Primary Protectors is not sufficient protection in order to connect this interface metallically to OSP wiring.
- The DS3 port(s) is/are suitable for connection only to shielded intra-building cabling grounded at both ends.
- This product is designed to be deployed in GR-3108-CORE environmental Class 1-2.
- This product is NRTL Listed to the applicable UL Standards.
- 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 (for example, 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.

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.

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 (gemeinsam) 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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