

CLEI: SOUIBVOL\_\_ Product P/N: 1442200G1

# Small Form-Factor Pluggable, 100Base-TX, RJ-45 Copper



Issue Date: November 2018 Document P/N: 61442200G1-22B

## **DESCRIPTION**



The ADTRAN 100Base-TX, RJ-45 Copper Small Form-Factor Pluggable (SFP) plugs into appropriate ADTRAN Ethernet modules to provide a 100Base-TX interface over an RJ-45 type copper connector.

The SFP supports the following features:

- 100Base-TX compliant
- Auto-Negotiation: full-duplex or half-duplex
- Uses Category 5 or 5e shielded twisted-pair cable (or better)

# NOTICE

The SFP may not operate in all SFP-based Ethernet modules. To determine if the SFP is appropriate for use in a particular module, refer to the documentation for that module, or contact ADTRAN Customer Support.

# NOTE

The SFP does not support Auto-MDIX.

### INSTALLATION

Prior to installation, inspect the SFP. If damage has occurred during shipping, file a claim with the carrier, and then contact ADTRAN Customer Support. Refer to "Warranty" on page 2.

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

- 1. If present, remove the safety cap from the connector of the SFP.
- Insert the SFP into the SFP cage of the host module, with the removal latch facing outward. Slide the SFP all the way into the cage.
- 3. Firmly squeeze the receptacle and SFP together, to ensure a proper connection.

#### NOTE

The latch on the SFP is for removal only.

4. Continue the installation and turn-up of the host module using the instructions in the documentation provided with the module or other system-level documentation available online at <a href="www.adtran.com">www.adtran.com</a>.

# **SPECIFICATIONS**

- General
  - ♦ Module type: SFP
  - ♦ Media Type: Copper
  - Signal data rate: 1.25 Gbps
  - ♦ Applications: Migration and integration of transport in packet switching networks
  - ♦ Diagnostic Monitoring: No
  - ♦ Distance: Maximum (over Cat 5 cable): 100 meters
- Operates in modules supporting the following voltage inputs
  - ♦ ±24 VDC Nominal (±20.0 VDC to ±28.3 VDC)
  - ◆ -48 VDC Nominal (-40.0 VDC to -56.7 VDC)
- Environmental
  - ♦ Protected Equipment Environment (Outside)
    - Operational temperature range: -40°C to +65°C
    - Storage temperature range: -40°C to +85°C
    - Relative humidity: 5 to 85%
- Extended environmental support
  - ◆ 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%

#### MAINTENANCE

The SFP does not require routine hardware maintenance for normal operation. ADTRAN does not recommend that repairs be attempted in the field. Repair services may be obtained by returning the defective unit to ADTRAN. Field support for software is provided through upgrade facilities. Refer to "Warranty" for further information.



# AFETY AND REGULATORY

#### ♠ WARNING

- The Ethernet port is classified as Type 2 or Type 4, as defined in GR-1089-CORE, Issue 5, Appendix B, and is suitable for connection to intrabuilding or unexposed wiring or cabling only. Do not metallically connect this port to any interface which connects to the Outside Plant (OSP) or to the OSP wiring. The addition of Primary Protectors is not sufficient protection in order to connect this interface metallically to OSP wiring.
- The Ethernet port is suitable for connection only to shielded intra-building cabling, grounded at both ends.

#### **⚠** CAUTION

- Electrostatic Discharge (ESD) can damage electronic modules. When handling electronic components, wear an antistatic discharge wrist strap to prevent damage. 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 is NRTL listed to all applicable UL standards. This product meets or exceeds all applicable requirements of NEBS, Telcordia GR-63-CORE, GR-78-CORE, and GR-1089-CORE. This product is intended for deployment in Central Office type facilities, EEEs, EECs, and locations where the NEC applies (e.g., Customer Premises).
- This product should be installed by qualified Service Personnel only, in an ADTRAN module intended for installation in an ADTRAN host system located in a restricted access location.
- Per GR-1089-CORE this product is designed and intended for installation as part of a Common Bonding Network (CBN). This product is not designed nor intended for installation as part of an Isolated Bonding Network (IBN).
- Per GR-1089-CORE, Section 9, this product does not have an internal DC connection between -48 VR and frame ground. This product can be deployed in an Isolated (DC-I) or Common (DC-C) configuration. For installations where other modules or the host system have internal connections between -48 VR and frame ground, the system would be intended for deployment only in a DC-C configuration.
- The host chassis frame ground terminal must be connected to an earth ground to ensure that the metal enclosure of this product is properly grounded via the backplane connector.

#### NOTE

- This product is designed for deployment in GR-3108-CORE environmental class 1 and 2, as defined in GR-3108-CORE, Issue 2.
- This product is designed to meet the following environmental
  - ♦ ETSI EN 300 019-1-1 "Classification of environmental conditions; Storage," Class 1.2

- ♦ ETSI EN 300 019-1-2 "Classification of environmental conditions; Transportation," Class 2.3
- ♦ ETSI EN 300 019-1-3 "Classification of environmental conditions; Stationary use at weather-protected locations," Class
- The equipment is designed to function without degradation during exposure to all test severities per Class 019-1-3 3.3.
- This product complies with ETSI EN 300 386 "Electromagnetic compatibility and Radio spectrum Matters (ERM); Telecommunication network equipment; Electromagnetic Compatibility (EMC) requirements."
- 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 the EU RoHS Directive 2002/95/EC and/or applicable exemptions. For more information on RoHS/WEEE, refer to www.adtran.com.