ET-509A
TP-BNC Converter

ET-508 /ET-508S
TP-Fiber (Multi-mode / Single-mode)

IEEE802.3 Ethernet Converter

1. Overview

IEEE802.3 10Mbps Ethernet supports various type media for network connection such as 10Base-2, 10Base-T and 10Base-FL. The media converter is used to convert one type media signal to other type equivalent that allows multiple type segments connect easily and inexpensively. This converter can be used as a standalone unit or as a slide-in module to the 19" Media Chassis (up to 10 units) for use at a central wiring closet.

2. Model Description

Model	Descripton	Connector Type
ET-508S	TP-FL (Fdx/Hdx supported)	RJ-45 ↔ 10Base-FL ST (SM)
ET-508	TP-FL (Hdx)	RJ-45 ↔ 10Base-FL ST (MM)
ET-509A	TP-BNC	RJ-45 ↔ 10Base-2 BNC

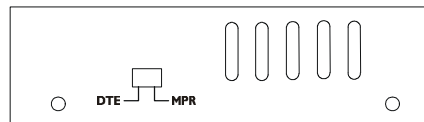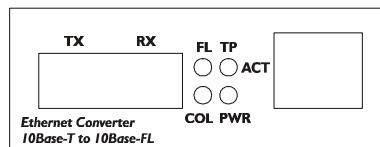| The available Fiber –optic mode	
ST, MM	ST type connector, Multi-Mode
ST, SM	ST type connector, Single-Mode

3. Checklist

Before you start installing the Converter, verify that the package contains the following:
— The Converter
— AC-DC Power Adapter
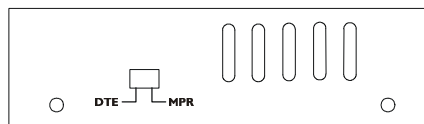— This User's Manual
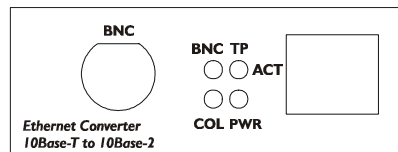— T-Connector(for ET-509A only)

Please notify your sales representative immediately if any of the aforementioned items is missing or damaged.

4. Panel Layout

10Mbps ET-508/ ET-508S Front and Side Panel

10Mbps ET-509A Front and Side Panel

Power Input +5VDC Jack on Rear Panel

5. Installing the Converter

For as a standalone unit:
⇒ Verify the Ac to DC adapter conforms to your country AC power requirement and insert the power plug
⇒ Connect the media cable for network connection

For as a slide-in unit:
⇒ The slide-in Media Converter and Converter Rack should be supplied only from the same source, both Media Converter and Rack are built to match each other at dimensions, DC jack, DC receptacle and power safety
⇒ Turn off the 19" converter rack power
⇒ Locate +5VDC power jack on converter back, carefully slide in and plug to 19" rack +5VDC power receptacle
⇒ Ensure that there is no activity in the network
⇒ Connect the media cable for network connection
⇒ Turn on the converter rack power, the Power LED will light up

Fiber Port:	Attach the fiber cable. The Tx, Rx fiber cable must be paired at both ends
TP Port:	Attach UTP Cat. 3 or 5 cable to TP port 　MPR　: To a Hub or Repeater 　DTE　 : To a workstation or NIC
	Slide switch "DTE" / "MPR" is on the side panel. Default: MPR
BNC Port:	Attach T-Connector to BNC port and connect the RG-58 coaxial network. Ensure the coaxial cable/segment is terminated at both ends properly

Note:
- Either DTE or MPR can be used at a time, do not attach both ports in network connection.
- 10Base-T port for cabling connections:
  DTE: To a UTP workstation
  MPR　: Up-link to a Hub or Repeater
- ET-509A is an Ethernet Repeater, a maximum of **four** repeaters may used between any two stations.

6. Connecting to 10/100Mbps N-Way Device

Converter Model	10/100 NWay Inter-operating
ET-508S* Single mode TP-Fiber Converter (Fdx/Hdx)	Non-Nway, it supports 10Mbps only. **Force** the NWay partner to 10Mbps speed at Fdx or Hdx manully.
ET-508 Multi mode TP-Fiber Converter (Hdx)	10/100Mbps is auto-sensing and comes to 10Mbps Hdx
TP-BNC Converter	10/100Mbps is auto-sensing and comes to 10Mbps Hdx

- ET-508S support Full-duplex mode operation that can double the bandwidth, please make sure the TP ends device also support full-duplex and set to it as well.
- ET-508/ ET-509A support Hlaf-duplex mode only.

7. LED Description

ET-508/ ET-508S TP-Fiber Converter:

LED	Color	Function
FL Link/Act	Green	Lit when Fiber connection is good Blinks when any FL traffic is present
TP Link/Act	Green	Lit when TP cable connection is good Blinks when any FL traffic is present
Power	Green	Lit when +5V power is coming up
Collision	Amber	Blinks when any collision is present

ET-509A TP-BNC Converter:

LED	Color	Function
BNC Act	Green	Blinks when BNC traffic is present
Power	Green	Lit when +5V power is coming up
TP Link/Act	Green	Lit when TP connection is good Blinks when TP traffic is present
Collision	Amber	Blinks when any collision is present

8. ET-508/508S Technical Specifications

- **Models** : a. **ET-508S:** Fdx/Hdx TP-Fiber Converter
  b. **ET-508**: Hdx TP-Fiber Converter
- **Standards** : IEEE802.3 10Base-T/10Base-FL
- **TP Port** : RJ-45 jack with a slide switch for "DTE" or "MPR" selection
  Fiber Port : ET-508 (ST multi-mode)
  ET-508S (ST single-mode),
- **UTP Cable** : Cat. 3 or 5 cable up to 100m
  Fiber Cable:
  50/125, 62.5/125, or 100/140*m*m multi-mode
  8.3/125, 8.7/125, 9/125 or 10/125*m*m single-mode

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Warning: To prevent from component damage, please check the cable and the your duplex **mode fiber device** in the other ends before power on

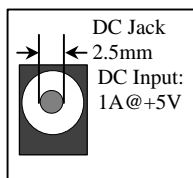| 10Base-FL ST/SC Fiber Cable Limitations:		
Fiber Half/Full-duplex	Multi-mode:	2Km
Fiber Full-duplex	Single-mode:	10Km

- **Data Transfer Rate:**
    10Mbps at half-duplex
    (20Mbps for full-duplex mode only)
- **LED Indicators :**
    FL Link/Act, Power, TP Link/Act, Col
- **Power Requirement** **:** 1A@+5VDC
- **Ambient Temperature :** 0° to 50°C
- **Humidity** **:** 5% to 90%
- **Dimensions :** 26.2(H) × 70.3(W) × 94(D) mm

Note: Connecting to Router, Bridge, or Switch, Hub, please refer to the device's Technical Manual.

9. TP-BNC Technical Specifications

- **Standards** : IEEE802.3 10Base-T/10Base-2
- **TP Port** : RJ-45 jack with a slide switch for "DTE" or "MPR" selection

  BNC Port : BNC connector
- **Cable and Distance :**
  — Category 3/5 unshielded or shielded twisted pair (UTP/STP) wire, maximum length 100 meters (328ft)
  — 0.2 inch diameter RG-58A/U, 50Ω(ohm) coaxial cable, maximum length 185 meters(607ft)
- **Data Transfer Rate:**
  10Mbps at Half-duplex mode
- **LED Indicators :** BNC/Act, Power, TP Link/Act, Col
- **Power Requirement :** 1A@+5V
- **Ambient Temperature :** 0° to 50°C
- **Humidity** : 5% to 90%
- **Dimensions :** 26.2(H) × 70.3(W) × 94 mm(D)

10. DC Power Jack and AC-DC Power Adapter

The DC jack's central post is 2.5mm wide, it conforms to the DC receptacle(2.5mm) on the 19-inch Converter Rack slot.

DC Jack
2.5mm
DC Input:
1A@+5V

Keep the AC-DC adapter as spare parts when Media converter is installed in a 19-inch Media Converter Rack.

AC-DC power adapter
AC Input : 100~240VAC 50/60Hz
DC Output: 1A@+5VDC

CE

Part No.: **EM-ET508V2**