

Fast Ethernet Converter
100Base-FX
Multi-mode to Single-mode

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FCC Warning

This equipment has been tested and found to comply with the regulations for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this user's guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

CE Mark Warning

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Revision

User's manual for PLANET Fast Ethernet Converter

Model: FT-712, FT-722, FT-733, FT-744

Rev 1.0 (Feb. 2000)

Part No. EMFT722V1

1. Overview

Thank you for purchasing PLANET FT-7XX family Fast Ethernet Fiber-optic Converter. This converter is used to convert one type media signal to other type equivalent that allows two type segments connect easily, efficiently 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 a multi-mode and single-mode Fiber combined networks at a central wiring closet. Please contact with your sales representative for more about the 19" media chassis.

2. Model List

Your Fast Ethernet Converter comes with one of the following models.

- ⇒ FT-712 : one onboard ST and SC fiber connector
- ⇒ FT-722 : two on board SC fiber connectors
- ⇒ FT-733 : two on board MT-RJ fiber connectors
- ⇒ FT-744 : two on board VF-45 fiber connectors

In the following sections, the term "FT-7XX" indicates the product family above, the term "MM" and "SM" represent Multi-Mode and Single Mode fiber-optic mode.

3. Checklist

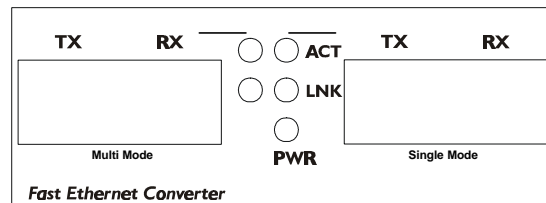
Your FT-7XX carton should contain the following items:

- ⇒ The Fast Ethernet Converter
- ⇒ AC-DC Power Adapter (Output: 5VDC, 1 A max.)
- ⇒ This user's guide

If any item is missing or damaged, please consult the dealer from whom you purchased your Fast Ethernet Converter.

4. Product Outlook

Right View (FT-712/FT-722)



Two fiber-optic connectors, multi-mode on the left, single-mode on the right and five LED indicators.

For FT-733, FT-744, the outlook of fiber port is accordant to its related port, i.e. MT-RJ or VF-45.

Rear View (FT-7XX)



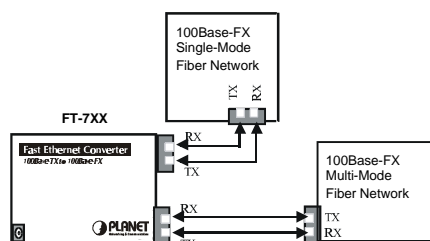
One DC jack for DC power input.

5. Installing the Converter

Please follow these steps to install the converter:

- Turn off the power of the device/station in a network to which the FT-7XX will be attached
- Ensure that there is no activity in the network

- Attach MM fiber cables from the FT-7XX to the MM fiber network. TX, RX must be paired at both ends
- Attach SM fiber cables from the FT-7XX to the SM fiber network. TX, RX must be paired at both ends.
- Connect the 5VDC power adapter to the FT-7XX and verify that the Power LED lights up.
- Turn on the power of the device/station, the Link and LEDs should light when all cables are attached



Note:

- To prevent from optic acceptor malfunction, check the both wires before power on the converter.

6. Duplex Mode setting

The FT-7XX is a transparent device between the two fiber networks, please make sure the both networks are set to the same duplex environment, or you may get a worse performance in both networks. Connect with full-duplex Fast Ethernet networks are strongly recommended.

7.LED indication

LED	COLOR	DESCRIPTION
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FX ACT	Green	Blinks when any FX packet is present
FX Link	Green	Lit when Fiber connection is good
PWR	Green	Lit when +5VDC power detected

8. Cable Connection Parameter

Fast Ethernet 100Base-X networks allows 512bit time delay between any two node stations in a collision domain.

The overall bit time of Fiber wires and devices must be within 512 bit time in a segment.

To extend the distance, you may use switch to break up a collision domain and extend the distance.

The limitations are as below:

Duplex	Connection	Limitation (max.)
Multi-Mode		
MM Half	Node to Node	412 meters
	Node to Switch	
MM Full	Node to Node	2 kilometers
	Node to Switch	
Single-Mode		
SM Half	Node to Node	412 meters
	Node to Switch	
SM Full	Node to Node	20 kilometers
	Node to Switch	

9. FT-7XX Technical Specifications

The FT-7XX comes with the following standard features:

- **Standard :** IEEE802.3u, 100Base-FX, IEEE802.3x Flow-Control
- **Connectors :**
 - ⇒ One Fiber-optic, 1300nm wavelength, MM

⇒ One Fiber-optic, 1300nm wavelength, SM
Connector-type different with models

- **Data Transfer Rate** : 100Mbps
- **Duplex mode support** : Full or half-duplex mode
- **LED indicators** : PWR, FX Link, FX ACT, FC
- **Power Requirement** : 5V ,1A
- **Ambient Temperature** : 0° to 70°C
- **Humidity** : 5% to 90%
- **Dimension** : 26 x 70 x 97mm (HxWxD)
- **Cable** :
 - ⇒ MM: 50/125 **mm** or 62.5/125 **mm** optic fiber
 - ⇒ SM: 8.3/125, 8.7/125, 9/125 **mm** optic fiber

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

10. Power information

The power jack of FT-7XX is with 2.5mm in the central post and required +5VDC power input. It will conform to the bundled AC-DC adapter and Planet's Media Chassis. Should you have the problem to make the power connection, please contact your local sales representative.

Please keep the AC-DC adapter as spare parts when your FT-7XX is installed to a Media Chassis.

Part No.:**EMFT722V1**