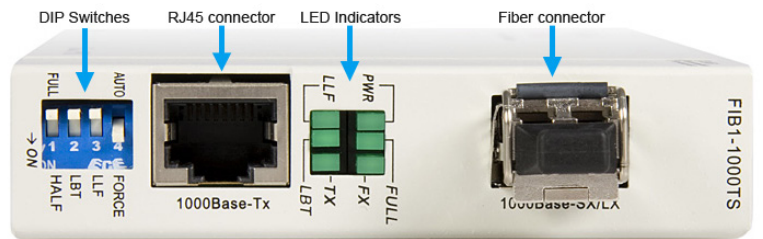


Gigabit Multi Mode Fiber/Ethernet Media Converter

ET91000LC / ET91000LCGB / ET91000LCEU
ET91000SC

- DE: Bedienungsanleitung - de.startech.com
- FR: Guide de l'utilisateur - fr.startech.com
- ES: Guía del usuario - es.startech.com
- IT: Guida per l'uso - it.startech.com
- NL: Gebruiksaanwijzing - nl.startech.com
- PT: Guia do usuário - pt.startech.com



*ET91000LC shown

Packaging Contents

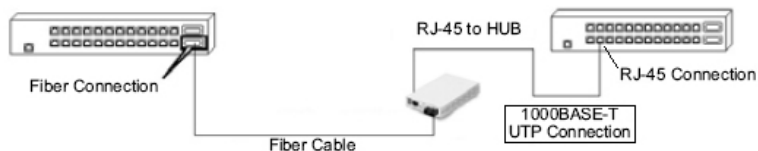
- 1 x Fiber Media Converter
- 1 x Power Adapter
- 1 x Instruction Manual

System Requirements

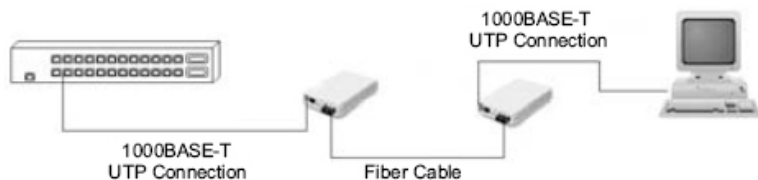
- Multi Mode fiber cable
- Cat5e or better UTP Ethernet cable
- Gigabit network infrastructure
- Available AC electrical outlet

Installation

1. Connect the fiber network cable to the LC connector on the fiber media converter. Using UTP Ethernet cable, connect the cable to the RJ45 jack.
2. Set the Auto/Force switch on the media converter, to turn auto negotiate on or off. If set to Force, set the Duplex switch (full/half) according to the specifications of your networking equipment.
3. The following example illustrates the connection scheme when connecting from a 1000Base-T Ethernet port of a hub/switch to a 1000Base-SX/LX port of another hub/switch, through the fiber media converter:



4. The following example illustrates the connection scheme when connecting from a 1000Base-T Ethernet port on a hub/switch to a 1000BASE-T Ethernet Network Interface Card (NIC) in a computer through the fiber media converter:



DIP Switch Configuration

Full/ Half:

The Fiber and UTP Duplex will be configured in Full duplex or Half duplex.

NOTE: This switch includes an "Auto Reset" function so the power-reset is not necessary when any modification is made here.

LBT:

Loop-back test and get remote side status:
(OFF = Not Active, ON = Active).

NOTE: If the local side loop-back test is active, then LEDs (except PWR) will all blink rapidly and refresh to display the remote side status.

LLF:

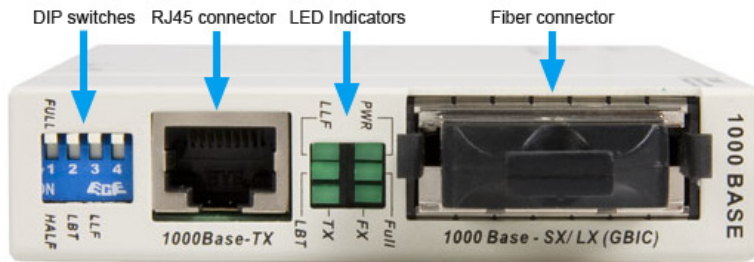
Link Loss Forwarding (OFF = Not active, On = Active)

Auto/Force:

Auto negotiate duplex mode, or force Full/Half via DIP switches.

LED Configuration

LED	Name	Status	Description
PWR	Power	ON	Unit is powered
		OFF	Unit is not powered
		Blink	LBT mode enabled
Full	Duplex Mode	ON	Fiber side Full Duplex Mode
		OFF	Half Duplex Mode
FX	Fiber Link	ON	Fiber link is detected
		OFF	Fiber link is not detected
		Blink	Fiber activity
LBT	Loop-back Test/Get CPE status	Blink	Mode enabled
		OFF	Mode disabled
LLF	Link Loss Forwarding	ON	Mode enabled
		OFF	Mode disabled
TX	Ethernet Link	ON	UTP link is detected
		OFF	UTP link is not detected
		Blink	UTP activity



*ET91000SC shown

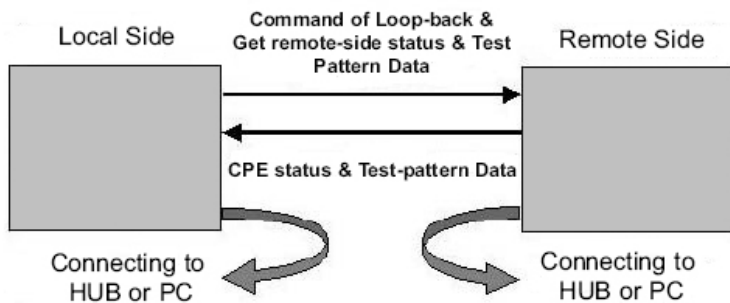
Specifications

	ET91000LC / ET91000LCGB / ET91000LCEU	ET91000SC
Connectors	1 x RJ45 Ethernet 2 x LC Fiber 1 x DC Power	1 x RJ45 Ethernet 2 x SC Fiber 1 x DC Power
Fiber Type	Multi Mode	
Optical Wavelength	850nm	
Maximum Distance	550m	
Duplex Modes	Full/Half	
Power Adapter	12VDC, 500mA, center positive	
Enclosure Material	Metal	
Supported Standards	IEEE 802.3ab, IEEE 802.3z	
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F)	
Storage Temperature	-10°C ~ 70°C (14°F ~ 158°F)	
Humidity	10% ~ 90% RH	
Dimensions	123.0mm x 86.0mm x 20.0mm	
Weight	690g	

Loop-back Testing (LBT) & Get CPE status

This fiber media converter incorporates a Fiber Loop-back Testing feature which allows the system to confirm whether or not the fiber or Ethernet circuit loop is complete. The local-side unit will send out a detect message which includes both command and test-pattern data to the remote-side unit and request for an answer. When the remote-side unit receives the message, it will attempt to recognize the command.

After the remote-side unit recognizes the command message, it will deliver the received test-pattern data back to the local-side unit, completing the circuit loop, and enabling the rack mount unit to easily monitor the remote side unit(s). The remote side status message includes the fiber-side link and duplex status, the UTP-side link, duplex, speed, power, transmission and fiber failure status. Please note that while Loop-back testing is in process, the fiber side transmission will be halted. If the local-side cannot access the remote-side while in Loop-back Testing mode, only the power LED will flash (rapidly):



FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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