

# FOXGATE EC-SFP1000-FE/GE-LFP Media Converter Technical Specification

## 1. Introduction

FOXGATE EC-SFP1000-FE/GE-LFP adaptive fast Ethernet optical Media Converter is a new product used for optical transmission via high-speed Ethernet. It is capable of switching between twisted pair and optical and relaying across 10/100/1000-TX to 100/1000 Base-Fx network segments, meeting long-distance, high-speed and high-broadband fast Ethernet workgroup users' needs, achieving high-speed remote interconnection for up to 100 km's relay-free computer data network. With steady and reliable performance, design in accordance with Ethernet standard and lightning protection, it is particularly applicable to a wide range of fields requiring a variety of broadband data network and high-reliability data transmission or dedicated IP data transfer network, such as telecommunication, cable television, railway, military, finance and securities, customs, civil aviation, shipping, power, water conservancy and oilfield etc, and is an ideal type of facility to build broadband campus network, cable TV and intelligent broadband FTTB/FTTH networks.



## 2. Overview

### 2.1 Features

- In accordance with Ethernet standards  
IEEE802.3, 10/100Base-TX/1000Base-TX and 100/1000Base-FX
- Supported Ports: LC for optical fiber; RJ45 for twisted pair
- Auto-adaptation rate and full/half-duplex mode supported at twisted pair port
- Auto MDI/MDIX supported without need of cable selection
- Up to 6 LEDs for status indication of optical power port and UTP port
- External and built-in DC power supplies provided
- Up to 1024 MAC addresses supported

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- 512 kb data storage integrated, and 802.1X original MAC address authentication supported
- Conflicting frames detection in half-duplex and flow control in full duplex supported

### 2.2 Technical Parameters

FOXGATE EC-SFP1000-FE/GE-LFP Ethernet Optical Media Converter	
Number of Network Ports	1
Number of Optical Ports	1
NIC Transmission Rate	10/100/1000Mbit/s
NIC Transmission Mode	10/100/1000M adaptive with support for automatic inversion of MDI/MDIX
Optical Port Transmission Rate	100/1000Base-FX
Operating Voltage	AC 220V or DC +5V
Overall Power	<3W
Network Ports	RJ45 port
Optical Specifications	Optical Port: SC, LC (Optional) Multi-Mode: 50/125, 62.5/125um                      Single-Mode: 8.3/125, 8.7/125um, 8/125,10/125um Wavelength: Single-Mode: 1310/1550nm
Data Channel	IEEE802.3x and collision base backpressure supported Working Mode: Full/half duplex supported with error rate of zero
Product Mode	Description
EC-SFP1000-FE/ GE-LFP	100/1000Base-FX SFP Slot Media Converter



### 3. Operating Environment

#### 3.1 Operating Voltage

AC 220V/ DC +5V

#### 3.2 Operating Humidity

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Operating Temperature: 0°C to +50°C

Storage Temperature: -20°C to +70°C

Humidity: 5% to 90%

### 3. Quality Assurance

MTBF > 100,000 hours;

Replacement within one year and non-charge repair within three years guaranteed

### 4. Application Fields

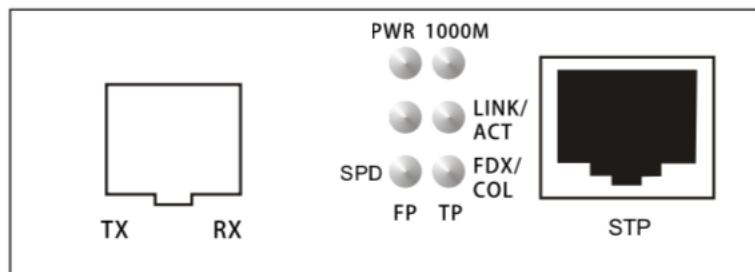
- For intranet prepared for expansion from 100M to 1000M
- For integrated data network for multimedia such as image, voice and etc.
- For point-to-point computer data transmission
- For computer data transmission network in a wide range of business application
- For broadband campus network, cable TV and intelligent FTTB/FTTH data tape
- In combination with switchboard or other computer network facilitates for: chain-type, star-type and ring-type network and other computer networks

### 5. Remarks and Notes

#### 6.1 Instructions on Media Converter Panel

Instructions on Front Panel

Identification for front panel of the media converter is shown below:



LED Description

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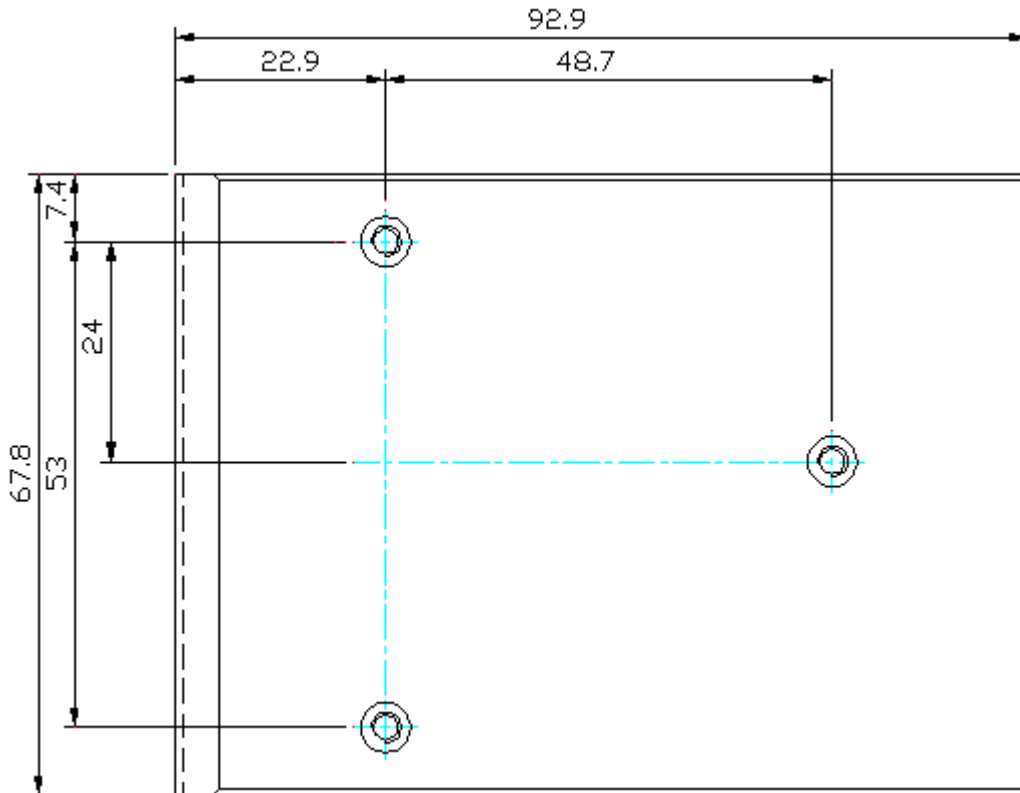
LED	Function	Status	Description
<b>PWR</b>	<b>Power LED</b>	<b>ON</b>	<b>Power is ON</b>
		<b>OFF</b>	<b>Power is OFF</b>
<b>1000M</b>	<b>STP Port Speed LED</b>	<b>ON</b>	<b>1000M</b>
		<b>OFF</b>	<b>10/100M</b>
<b>LINK/ACT FX</b>	<b>Fiber Port Link/ Action Status LED</b>	<b>ON</b>	<b>Fiber Port is Linked</b>
		<b>Blink</b>	<b>Fiber Port is Activated</b>
		<b>OFF</b>	<b>Fiber Port is NOT Linked</b>
<b>LINK/ACT TX</b>	<b>STP Port Link/ Action Status LED</b>	<b>ON</b>	<b>STP Port is Linked</b>
		<b>Blink</b>	<b>STP Port is Activated</b>
		<b>OFF</b>	<b>STP Port is NOT Linked</b>
<b>SPD</b>	<b>Fiber Speed Status LED</b>	<b>ON</b>	<b>1000M</b>
		<b>OFF</b>	<b>100M</b>
<b>FDX/COL</b>	<b>STP Port Full Duplex LED</b>	<b>ON</b>	<b>Full duplex</b>
		<b>OFF</b>	<b>Half duplex</b>

## DIP Switch Setting

DIP Number	Switch Status	Function Descriptions
1	ON	LFP function enabled
	OFF	LFP function disabled
2	OFF/OFF	
	OFF/ON	
3	ON	Ethernet port is forced to 10M
	OFF	Ethernet port is 10/100/1000M
4	ON	
	OFF	

## 6.2. Mounting Dimensions Sketch

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## 6.3. Product Connection Diagram

