Optinet Technology Co., Ltd
Add: 4th Floor Xiufeng Industrial Park, Buji Street, Longgang District, Shenzhen,China 518112
Tel: +86-755-28471034 Fax:+86-755-61824579
www.optinetec.com sales@optinetec.com

10/100M Fiber Ethernet Media Converter

1. Product Description

The 10/100M ethernet media converter designed to convert 100BASE-FX fiber to 100Base-TX copper media or vice versa. It is a cost-effective solution for extending network transmission distance from 100m over copper cables to 120km over fiber optic cable. Designed under IEEE802.3u 10/100Base-TX and 100Base-FX standards, supports transmission in dual-fiber multi-mode, dual-fiber single-mode and single-fiber single-mode.

2. Features

- Support auto negotiation of 10/100Mbps and auto MDI/MDI-X for TP port
- Support auto full-duplex and half-duplex transmission mode for FX port
- Support Link Fault Pass Through (LFP)
- Supporting 10/100Mbps store-and-forward and 100Mbps cut-through transmission
- Extends fiber distance up to 2km for multi-mode fiber and 120km for single mode
- Easy-to-view LED indicators provide status to monitor network activity easily
- Low power consumption, stable mechanical construction and reliable performance

3. Specification

Parameter	Specifications
Access mode	10/100Mbps
Standard	IEEE802.3 10Base-T Ethernet, IEEE802.3u,100Base-FX Fast Ethernet, IEEE802.3x Flow Control
Wavelength	850nm/1310nm/1550nm
Transmission Distance	Dual-fiber Multi-mode: 2 km; Dual-fiber single mode: 20/40/60/80/100/120km; Category-5 twisted pairs: 100m
Port	One RJ45 port: Connected to STP/UTP category-5 twisted pairs One Fiber port: Single mode Dual-fiber: SC or FC (9/125μm)

	Multi-mode dual fiber: SC/ST/FC/ (50/125μm or 62.5/125μm)
Conversion Mode	Store and Forward mode or Cut-Through mode
MAC address table	1K
Buffer space	Built in 128Kb RAM for data buffer
Flow control	Full duplex: flow control; Half duplex: back pressure mode
BER (Bit error rate)	<1/10000000000
MTBF	100,000 hours
LED indicator	PWR(power), FX Link/ACT (fiber link/action), TP Link/ACT (twisted pair link/action), FDX (FX full duplex mode), TP 100M(twisted pair transmission rate of 100M), SD(optical link action)
Power supply	External: AC220V DC12V/48V input, 5V1A output
Power consumption	< 2W
Operating temperature	-10~55ºC
Operating humidity	5%~90%
Storage temperature	-40~70ºC
Storage humidity	5% ~ 90% (non-condensing)
Dimensions	26mm (H) x 70mm (W) x 95mm (D) External Power 30mm (H) x 110mm (W) x 140mm (D) Built-in power 110mm(H)*22mm(W)*81mm(D) Module card

3. DIP Switch

Pin No	Function	ON	OFF
1	LFP	LFP Enabled	LFP Disabled
2	Operating Mode	2 ON, 3 OFF: Store and forward	
3		2 OFF, 3 ON: Cut-through	
4	TX Mode	Force Mode	Auto Negotiation
5	IEEE802.3x	Disabled	Enabled
6	TX Speed	10M	100M

7	TX Port	Half Duplex	Full Duplex
8	FX Port	Half Duplex	Full Duplex

4. Ordering Information

Model No	Fiber Mode	Wavelength	Distance	Fiber Interface	Power Supply
OP-310-M85-05	MM	850nm	550m	SC/ST/FC	External/Internal
OP-310-M31-2	MM	1310nm	2km	SC/ST/FC	External/Internal
OP-310-S31-20	SM	1310nm	20km	SC/ST/FC	External/Internal
OP-310-S31-40	SM	1310nm	40km	SC/ST/FC	External/Internal
OP-310-S55-60	SM	1550nm	60km	SC/ST/FC	External/Internal
OP-310-S55-80	SM	1550nm	80km	SC/ST/FC	External/Internal
OP-310-S55-100	SM	1550nm	100km	SC/ST/FC	External/Internal