

# 10/100/1000M Self-adaptive Fiber Media Converter



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### CE FC RoHS

Ethernet optical fiber transceiver can efficiently realize the conversion between 10 / 100/1000M Ethernet electrical port and fiber port, automatically compatible with half / full duplex mode , It can carry out long-distance data and video signal transmission via optical fiber, which is convenient for network upgrading and flow control. Adopt international advanced chip and design to ensure the stability and practicability. With ultra-low transmission delay and line speed forwarding ability, it can realize flexible Ethernet expansion even in harsh environment. Use standard international optical and electronic components to ensure reliable and stable operation. This series of products can be configurated with combo port, able to connect with single-mode fiber or multi-mode fiber according to the user's situation. Adopts double side ventilated heat dissipation design. Support desk and rack installtion.

#### **Main Features**

- Built-in high efficiency switching core to achieve flow control and reduce broadcast packet
- Automatically adapt to 10/100/1000Mbps network environment, free conversion network upgrade
- Support full-duplex and half-duplex transmission mode, automatic negotiation
- Support 9216 byte packets, monitoring and transmission more smooth
- Complete power link, working mode indicator light, working state at a glance
- low power consumption low heat, long time stable work, network security advanced
- Support dual-fiber multimode, dual-fiber singlemode, single-fiber single-mode, and multiple fiber interface options

#### **Application Environment**

#### **Metro Optical Broadband Network:**

<u>Data network operators such as telecommunications,</u> cable TV, and network system integration, etc.

#### **Broadband private network:**

Suitable for financial, government, oil, railway, electric power, public security, transportation, education and other industries

#### Multimedia transmission:

Integrated transmission of images, voice and data, suitable for remote teaching, conference TV, videophone and other applications

#### **Real-time monitoring:**

<u>Simultaneous transmission of real-time control</u> <u>signals, images and data</u>

# **DATA SHEET**



Fyecifications           I/O Interface           Power         DC 5V           Ethernet         1-Port 10/100/1000M RJ45 1-Port 1000M fiber ports           Performance           Switching Capacity         4Gbps           Throughput         2.976Mpps           Packet Buffer         2K           MAC Address         2K           Jumbo Frame         9216bytes           Transfer Mode         Store and forward           MTBF         100000 hour           Standard           Network protocol         IEEE802.3 (1008ase-TX/FX) IEEE802.3 (10008ase-TX/FX) IEEE802.3 (10008ase-TX/FX) IEEE802.3 (1000 dase-TX/FX)           Industry Standard         EMI: PCC Part 15 CISPR (ENS5032) class A EMS: EN61000-4-2 (ESD), EN61000-4-4 (EFT) Shock: IEC 60068-2-23 Vibration: IEC 60068-2-23 Vibration: IEC 60068-2-23 Vibration: IEC 60068-2-6           Network Medium         108ase-T : Cat3, 4, 5 or above UTP(≤100m) 1008ase-TX : Cat5 or above UTP(≤100m) 1008ase-TX : Cat5 or above UTP(≤100m)           Optical Media         Multimode fiber : 50/125, 62.5/125, 100/140um Single mode fiber : 8/125, 8.7/125, 9/125, 10/125um			
Power	Specifications		
Performance	I/O Interface		
Performance	Power	DC 5V	
Switching Capacity         4Gbps           Throughput         2.976Mpps           Packet Buffer         2K           MAC Address         2K           Jumbo Frame         9216bytes           Transfer Mode         Store and forward           MTBF         100000 hour           Standard           Network protocol         IEEE802.3 (1008ase-T) IEEE802.3u (1000Base-TX/FX) IEEE802.3x (Flow control)           Optical characteristics         multi mode : 850/1310nm (0-2KM) Single mode : 1310/1550/1490nm (0-120KM)           Industry Standard         EMI: FCC Part 15 CISPR (EN55032) class A EMS: EN61000-4-2 (ESD), EN61000-4-4 (EFT) Shock: IEC 60068-2-27 Free Fall: IEC 60068-2-32 Vibration: IEC 60068-2-6           Network Medium         10Base-T: Cat3, 4, 5 or above UTP(≤100m) 1000Base-TX: Cat5 or above UTP(≤100m)           Optical Media         Multimode fiber : 50/125, 62.5/125, 100/140um Single mode fiber : 8/125, 8/7/125, 9/125, 10/125um	Ethernet		
Throughput 2.976Mpps  Packet Buffer 2k  MAC Address 2k  Jumbo Frame 9216bytes  Transfer Mode Store and forward  MTBF 100000 hour  Standard  Network protocol IEEE802.3 (10Base-T) IEEE802.3u (100Base-TX/FX) IEEE802.3u (100Base-TX/FX) IEEE802.3u (100Base-TX/FX) IEEE802.3u (Flow control)  Optical characteristics multi mode: 850/1310nm (0-2KM) Single mode: 1310/1550/1490nm (0-120KM)  Industry Standard EMI: FCC Part 15 CISPR (EN55032) class A EMS: EN61000-4-2 (ESD), EN61000-4-4 (EFT) Shock: IEC 60068-2-27 Free Fall: IEC 60068-2-32 Vibration: IEC 60068-2-6  Network Medium 10Base-T: Cat3, 4, 5 or above UTP(≤100m) 100Base-TX: Cat5 or above UTP(≤100m)  Optical Media Multimode fiber: 50/125, 62.5/125, 100/140um Single mode fiber: 8/125, 8.7/125, 9/125, 10/125um	Performance		
Packet Buffer         2K           MAC Address         2K           Jumbo Frame         9216bytes           Transfer Mode         Store and forward           MTBF         100000 hour           Standard           Network protocol         IEEE802.3 (10Base-T) IEEE802.3u (100Base-TX/FX) IEEE802.3ab (1000Base-TX/FX) IEEE802.3x (Flow control)           optical characteristics         multi mode : 850/1310nm (0-2KM) Single mode : 1310/1550/1490nm (0-120KM)           Industry Standard         EMI: FCC Part 15 CISPR (EN55032) class A EMS: EN61000-4-2 (ESD), EN61000-4-4 (EFT) Shock: IEC 60068-2-27 Free Fall: IEC 60068-2-32 Vibration: IEC 60068-2-6           Network Medium         10Base-T: Cat3, 4, 5 or above UTP(≤100m) 100Base-TX: Cat5 or above UTP(≤100m)           Optical Media         Multimode fiber : 50/125, 62.5/125, 100/140um Single mode fiber : 8/125, 8.7/125, 9/125, 10/125um	Switching Capacity	4Gbps	
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Transfer Mode         Store and forward           MTBF         100000 hour           Standard           Network protocol         IEEE802.3 (10Base-T) IEEE802.3u (1000Base-TX/FX) IEEE802.3ab (1000Base-TX/FX) IEEE802.3x (Flow control)           optical characteristics         multi mode : 850/1310nm (0-2KM ) Single mode : 1310/1550/1490nm (0-120KM)           Industry Standard         EMI: FCC Part 15 CISPR (EN55032) class A EMS: EN61000-4-2 (ESD), EN61000-4-4 (EFT) Shock: IEC 60068-2-27 Free Fall: IEC 60068-2-32 Vibration: IEC 60068-2-6           Network Medium         10Base-T : Cat3, 4, 5 or above UTP(≤100m) 100Base-TX : Cat5 or above UTP(≤100m) 1000Base-TX : Cat5 or above UTP(≤100m)           Optical Media         Multimode fiber : 50/125, 62.5/125, 100/140um Single mode fiber : 8/125, 8.7/125, 9/125, 10/125um	MAC Address	2K	
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IEEE802.3u (100Base-TX/FX)         IEEE802.3u (1000Base-TX/FX)         IEEE802.3a (Flow control)         optical characteristics       multi mode : 850/1310nm (0-2KM )         Single mode : 1310/1550/1490nm (0-120KM )         Industry Standard       EMI: FCC Part 15 CISPR (EN55032) class A         EMS: EN61000-4-2 (ESD), EN61000-4-4 (EFT)         Shock: IEC 60068-2-27         Free Fall: IEC 60068-2-32         Vibration: IEC 60068-2-6         Network Medium         10Base-T : Cat3, 4, 5 or above UTP(≤100m)         100Base-TX : Cat5 or above UTP(≤100m)         Optical Media       Multimode fiber : 50/125, 62.5/125, 100/140um         Single mode fiber : 8/125, 8.7/125, 9/125, 10/125um	Standard		
Single mode : 1310/1550/1490nm ( 0-120KM )  EMI: FCC Part 15 CISPR (EN55032) class A	Network protocol	IEEE802.3u (100Base-TX/FX) IEEE802.3ab (1000Base-TX/FX)	
EMS: EN61000-4-2 (ESD)、EN61000-4-4 (EFT)  Shock: IEC 60068-2-27  Free Fall: IEC 60068-2-32  Vibration: IEC 60068-2-6  Network Medium  10Base-T: Cat3、4、5 or above UTP(≤100m)  100Base-TX: Cat5 or above UTP(≤100m)  1000Base-TX: Cat5 or above UTP(≤100m)  Optical Media  Multimode fiber: 50/125、62.5/125、100/140um  Single mode fiber: 8/125、8.7/125、9/125、10/125um	optical characteristics		
100Base-TX : Cat5 or above UTP(≤100m) 1000Base-TX : Cat5 or above UTP(≤100m)  Optical Media Multimode fiber : 50/125、62.5/125、100/140um Single mode fiber : 8/125、8.7/125、9/125、10/125um	Industry Standard	EMS: EN61000-4-2 (ESD)、EN61000-4-4 (EFT) Shock: IEC 60068-2-27 Free Fall: IEC 60068-2-32	
Single mode fiber: 8/125、8.7/125、9/125、10/125um	Network Medium	100Base-TX : Cat5 or above UTP(≤100m)	
Protection	Optical Media		
	Protection		
Security Certificae CE、FCC、RoHS	Security Certificae	CE、FCC、RoHS	

# **DATA SHEET**



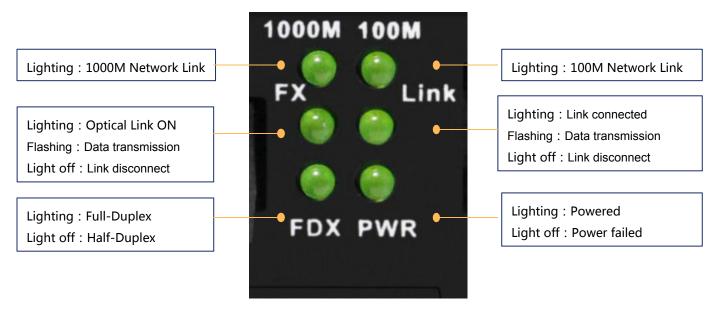
Environment		
Working Environment	Working Temperature : -20~50°C	
	Storage Temperature : -40~70°C	
	Working Humidity: 10%~90%, non-condensing	
	Storage Temperature: 5%~90%, non-condensing	
	Working Height : Maximum10,000 feet	
	Storage heigh: Maximum 10,000 feet	
Mechanical		
Structure Size	Product Size: 94*70*26mm	
	Package Size: 245*190*60mm	
	Product Net-Weight: 0.2*2kg	
	Product Gross-Weight: 0.7kg	
Packing Info	MEAS: 620*400*510mm	
G	Packing Qty: 40 Pair	
	Packing weight: 29.5 KG	
Power Voltage	Adapter input voltage : AC 100-240 V	
	Media Converter input voltage : DC 5V	
Package List	Media Converter 2 pcs, Power Adapter 2 pcs , User manual 1 pcs, Qualification Card 1 pc	
Indication		
LED Indicators	PWR ( Power indicator )	
	FDX ( Network mode )	
	1000M ( 1000M Network Link )	
	100M ( 100M Network data )	
	FX ( Optical Link&Act )	
	Link ( Network Link&Act )	

Ordering Info		
HR100W-GE-550	1000M Fiber Media Converter-dual-fiber multimode 550m TX/RX 850	
HR100W-GE-2	1000M Fiber Media Converter-dual-fiber multimode 2KM TX/RX 1310	
HR100W-GE-3-T	1000M Fiber Media Converter-single-fiber single mode 3KM TX1310/RX1550	
HR100W-GE-3-R	1000M Fiber Media Converter-single-fiber single mode 3KM TX1550/RX1310	
HR100W-GE-25-T	1000M Fiber Media Converter-single-fiber single mode 20KM TX1310/RX1550	
HR100W-GE-25-R	1000M Fiber Media Converter-single-fiber single mode 20KM TX1550/RX1310	

## **DATA SHEET**



#### **Panel Indication**





### **Application**

