YOUXIN

www.youfibercable.com

Ningbo Youxin Optic-Electronic Technology Co.,LIMITED

Gigabit Media Converter

USER MANUAL

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Safety Precautions

Please read the following precautions carefully before installation and operation. Manufacture Inc is not responsible for any losses or damages due to any violation of the safety precautions.

The output of the media converter is invisible laser radiation. During the installation, operation and maintenance of this product, never aim the optical fiber connector connecting to the converter output port or optical fiber end at one's body to avoid the injury to eyes or skin.

Avoid any damage from severe vibration or collision since precision optical components are built-in. Shut down the power of the converter before connecting the output port of the media converter to the optical fiber connector.

No disassembly or maintenance is allowed because there are static sensitive components in the media converter. Disassembly or maintenance approved or guided by Ours Inc technicians should be carried out according to the static protection procedures.

Please contact us when there is anything wrong, and do not dismantle media converter without permission; otherwise, it may cause irreversible damage. The company holds that anyone who dismantles it without permission gives up the rights of warranty automatically.

1 Overview

Gigabit Ethernet fiber converter uses the switching technology to conduct media conversion, which meets the standards of IEEE802.3, IEEE802.3u, IEEE802.3z and IEEE802.3ab. This kind of fiber converter supports two types of media network connections: 10Base-T/100Base-TX/1000Base-T and 1000Base-SX/LX. The fiber converter can conduct mutual conversion between 10Base-T/100Base-TX/1000Base-T twisted pair electrical signals and 1000Base-SX/LX optical signals. This kind of converter extends the transmission distance of a network from 100M over copper wires to 120 KM. This fiber converter supports transmission in dual-fiber multi-mode, dual-fiber single-mode and single-fiber single-mode fibers.

2 Product Picture

Standalone type, built-in power Plug-in card type

3 Technical Specifications

Parameters	Specification
Access mode	1000Mbps Gigabit Ethernet
Standard	IEEE802.3 10Base-T Ethernet,IEEE802.3u 100Base-TX/FX Fast Ethernet, IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-SX/LX Gigabit Ethernet, IEEE802.1qVLAN, IEEE802.1p QoS, IEEE802.1d Spanning Tree
Wavelength	850nm/1310nm/1550nm
Transmission distance	Dual-fiber multi-mode: 220m (fiber size: 62.5/125μm)/550m (fiber size: 50/125μm) Dual-fiber single-mode: 10/25/40/60/80/100/120Km Single-fiber single-mode: 10/25/40/60/80Km Category-5 twisted pairs: 100m
Port	One RJ45 port: Connected to STP/UTP category-5 twisted pairs One fiber port: dual-fiber multi-mode – SC (fiber size: 50,62.5/125μm) Dual-fiber single-mode – SC/FC fiber port (fiber size: 9/125μm) Single-fiber single-mode – SC/FC fiber port (fiber size: 9/125μm)
Delay	<10μs

Bit error rate	<1/1000000000
MTBF	100,000 hours
Power	AC 220/AC 110V/DC-48 (built-in)
Power consumption	5W
Operating temperature	-10~60°C
Operating humidity	5%~90%
Storage temperature	-40~70°C
Storage humidity	5%~90% (non-condensing)
Dimension	152*125*35 (mm) for standalone type; 115*88*25 (mm) for card type
Weight	0.8KG for standalone type; 0.25KG for card type

4. Installation and Operation procedure

a) Installation

The media converting cards should be installed together with the 17-slot chassis or 1-slot chassis. Install the 17-slot chassis on the standard 19" cabinet before inserting the media converting cards into the chassis in order. Pay attention to fixing screw caps on the media converting cards tightly.

The standalone media converter can be set directly on a desk.

Notes: Indoor installation is recommended to avoid weather exposure.

b) Operation procedure

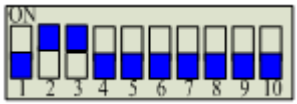
i. Ensure that optical fiber used matches the media converter. When single mode optical fiber is used, select a media converter with a port for single mode optical fiber; while multi mode optical fiber is used, select a media converter with a port for multi mode optical fiber.

ii. Ensure that the power supply meets the requirement of the media converter and the wire is connected correctly .Make sure that the power is off before connection.

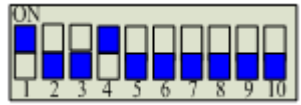
iii. Connect the twister and fiber to the corresponding ports of the media converter. The connectors of the twister and fiber should comply with related standards. Arrange the fiber as straightly as possible. When bending is necessary, the bending diameter should not be less than 50cm. The twister should not be too short or bundled too tight. After tied up, a length of 5 – 10cm should be left.

5. DIP switch setting

5.1 Plug-in card type:

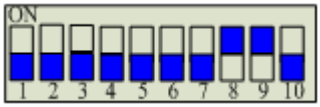


Full-duplex 1000M

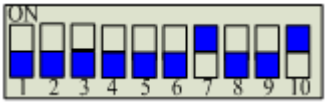


10/100M auto-negotiation

5.2 Standalone type:



Full-duplex 1000M



10/100M auto-negotiation

6. LED Indicator

LED	Function
PWR	Indicate if the power is on or not.
TL	Indicating light of connection/activity of Ethernet port of the media converter and the opposite end equipment's Ethernet port. Normal on means Ethernet port is connected; blink means Ethernet port is connected and transmitting or receiving data. When function of LLCF is used, off means abnormal connection of an Ethernet port or fiber optic port at local or remote end in the link, whereas off, when the function of LLCF is shut down, means abnormal connection of the local Ethernet port.
1000	Ethernet port rate indicating light. Normal on is 1000Mbps, while off is 10Mbps or 100Mbps.
TFD	Half-duplex/full-duplex mode of Ethernet port indicating light. Normal on means full-duplex; off means half-duplex; blink means link conflict.
FL	Indicating light of connection/activity of optical fiber port of the media converter and the opposite end

	equipment optical fiber port. Normal on means fiber optic port is connected; blink means fiber optic port is connected and transmitting or receiving data.
RX	Indicating the receiving of the Ethernet port; Normal on mean receiving the data; off means there is no data received.

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