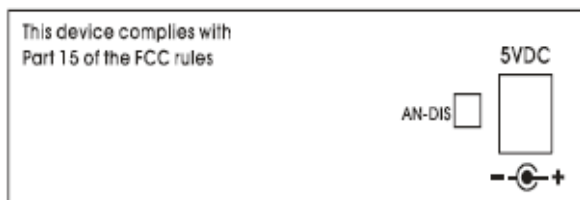


5. SPD/TX1000: be light shows twisted-pair transmit speed is 1000Mbps, extinguish shows twisted-pair transmit speed less than1000Mbps.

6. TX Link/Act: be light shows twisted-pair link connected right, fulgurated shows twisted-pair have data to transmit.

## 5. Mode choice function



LAN port Link speed would passed AN-DIS switch may move to:

1. Push down LAN port's Link speed is 1000Mbps
2. Flip on LAN port Link speed is self-adapt
3. Configure state is Auto Negotiation leave factory

## 6. Fiber part parameter

	Dynamix -20km 10/100/1000 WDM(A/B)	Dynamix -60km 10/100/1000 WDM(A/B)
Connect type	SC	SC
Typical distance	20 km	60 km
Fiber type	Single-mode	Single-mode
Wavelength	1310/1550nm	1310/1550nm
Min TX PWR	-6.0 dBm	0.0 dBm
Max TX PWR	0.0 dBm	+2.5 dBm
Sensitivity	<-22 dBm	<-26 dBm
Link Budget	16.0 dBm	26.0 dBm

## 6. Packing

1. Dynamix WDM Gigabit fiber optic media converter
2. Power adapter AC220V/DC5V
3. User Manual

## 7. Pay attention to proceeding

1. Optical port working mode is 10/100/1000M Full Duplex , LAN port is Auto Negotiation.

2. Twisted-pair interface initialization base to couple equipment state to set self's state. If can't test opponent state, that state is uncertainty.

3. Strictly prohibit use unaided eye to look at the TX fiber transmit port when the media converter is electrify state.

4. Please put dustproof cover on fiber interface, when the fiber optic media converter is not used.

5. When the product connecting with other equipment (router, switch, HUB, NIC), the interconnection equipment's optical interface's speed and mode must be consistent (multimode and single-mode).

Between Interconnection equipment's LAN port's speed should mismatch. (1000Base-TX/ 100Base-TX/ 10Base-T)

**Dynamix®**  
www.godynamix.com

## Dynamix WDM 10/100/1000M Gigabit Ethernet media converter

Dynamix -20km 10/100/1000WDM(A/B)  
Dynamix -60km 10/100/1000WDM(A/B)



**User Manual**

**V. 2.2**

# **Dynamix Gigabit WDM Single fiber dual-direction fiber optic media converter**

## **1. Overview**

Dynamix single-fiber dual-direction fiber optic media converter be used Ethernet's electric signal to transmit optical signal 's electricity signal transceiver, the feature is adopt one fiber cable can receive and transmit optical signal in-phase, enhance one double transmit energy than existing optical fiber, economized fiber cable's source. Dynamix single-mode single-fiber series is a self-adapted single-fiber dual-direction fiber optic media converter with 10/100/1000M, it's protocol IEEE802.3ab, IEEE802.3u, 10Base-T, 100Base-TX, 1000Base-TX, 1000Base-SX, 1000Base-LX's standard and passed the information industry ministry's telecom equipment enter networking examination. Dynamix single-mode single-fiber is a gigabit single-mode single-fiber media converter with 1000M.

Due to single-fiber dual-direction media converter's transmit optical signal transmit wavelength and receive wavelength are difference, so must be use by pair - Dynamix -20km 10/100/1000WDM A and Dynamix -20km 10/100/1000WDM B, for example. One TX and one RX, be one pair, can't use to wrong, If not will can't working normal. Singlemode single-fiber's transmit optical signal is wavelength 1550nm, receive optical signal is wavelength 1310nm; single-fiber dual-direction media converter have one RJ-45 interface and one SC single-core interface, separate by twisted-pair and fiber to connecting. Single-fiber media converter have 6 LED indicator: POWER, SPDFX1000, SPDTX1000, FX Link/ACT, TX Link/ACT, FDX.

## **2. Specification and Feature Explain**

1. Accord with IEEE802.3ab/z, IEEE802.3u, IEEE802.3x, IEEE802.1q 100Base-T, 100BASE-TX, 1000Base-TX, 100Base-SX, 1000Base-LX standard.
2. Support TCP/IP PPPOE DHCP ICMP NAT protocol
3. Flow control mode: full duplex adopt IEEE802.3X, half duplex adopt Backpressure's standard.
4. Electricity port support auto-negotiation function, auto-regulation transmit mode and transmit speed.
5. Support Auto-MDI/MDIX automatic reverse.
6. Support storage transmit mode, capability is 256K.
7. Support electricity port's 1000M mode or self-adapt mode's switch.
8. Afford of state indicator, external power (output 5V-50HZ 1A)
9. Interface: electric port - RJ-45, fiber port - SC
10. Twisted-pair: CAT.5 CAT.6
11. Singlemode fiber: 8/125, 8.3/125, 9/125µm
12. Working temperature: 0~50°C
13. Storage temperature:-20~70°C
14. Humidity: 5% ~ 90% (non-condensing)
15. Size: 32\*128\*158mm(H\*W\*L)

## **3. Installed and Initialization**

Please use the follow approach installed single-fiber dual-direction fiber optic media converter:

1. Connecting optical cable, pay attention to matching with TX and RX fiber link by two media converter, don't put the interface by the same to directness connection.

2. Put UTP jump cable through networking equipment connecting to single fiber media converter's RJ-45 interface, the media converter's electricity port can self-adapt through line and intersection line.
3. Put power adapter's DC plugs pin connect to fiber optic media converter's DC plugs pin, then receptacle by the power adapter, next connecting power.
4. Here you can put self-check gradation make the indicator fulgurate, so the fiber optic media converter's power would be light, after self-check you should warranted fiber optic media converter's test to decided media converter electricity port's working state and the couple networking equipment electricity port state. If can't test the couple equipment, media converter's electricity port's state uncertainty, so TX Link and SPD/TX 1000 indicator can't light. If the electricity port connecting right, FX Link SPD would be light.

## **4. LED Indicator**

Single fiber dual-direction media converter have 6 LED indicator, they would be show media converter's working state, warranty, LED shows, that would estimated, if the media converter working normal or have any wrong, that help us find the fault. the function will separate explain as follow:

1. PWR: be light shows DC5V power adapter working normal
2. Speed is 1000 Mbps, extinguish shows fiber transmit speed less than 1000Mbps.
3. FX Link/Act: light fiber link connecting right, fulgurate shows transmitting data.
4. FDX: be light shows fiber use full duplex mode to transmitting data.