

Gigabit Ethernet Bridge Media Converter

GTR20WA/GTR20WB(1*SM WDM+1*RJ45 10/100/1000)

1. Overview

IEEE802.3z/ab 1000Mbps Gigabit Ethernet supports two Types media for network connection such as 10/100/1000Base-T And 1000Base-SX/LX. The bridge media converter is Designed with a switch controller and buffer memory that Connects two types segments to operate smoothly. With Internal power unit and cooling fan, it provides good stability and reliability.

2. Checklist

Before you start installing the Converter, verify that the package contains the following:

- _ The TP-Fiber Converter
- _ AC-DC power Adapter or AC power cable
- _ This User's Manua

Please notify your sales representative immediately if any of the aforementioned items is missing or damaged.

Front and Side Panel, LED Description

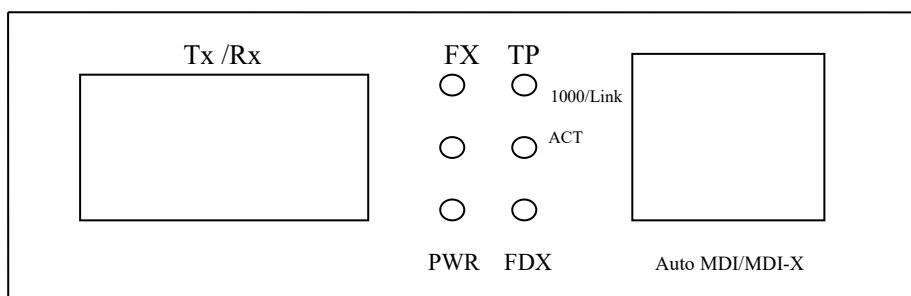


Fig 1 Converter Front Panel for external power

3. LED Description

LED	Color	Function
TP ACT	Green	Blinks when TP data is transmitting
TP FDX	Green	Lit when TP full-duplex mode is active off when TP half-duplex mode is active .Blinks when collision signal is present
TP 1000/LINK	Green	Lit when TP connection is 1000Mbps Off when TP connection is 10 or 100Mbps
FX 1000/LINK	Green	Lit when 1000Base-X connection is good
PWR	Green	Lit when power is coming up

4 Installing the Converter

=>Wear a grounding device for electrostatic discharge

=>Install the media cable for network connection

=>Verify that the voltage of AC power is correct and plug in AC power cord

Fiber Port	Attach the fiber cable. The Tx, Rx fiber cable Must be paired at both ends
TP Port	Attach TP Cat, 5 cable to TP port. The 10/100/1000 TP port is auto-linking the Tx/Rx wires (e.g.either MDI-X or MDI-II). It will auto-cross-connect the transmit/receive wires to a switch or to a workstation, be sure of the proper wiring and the Link LED status.

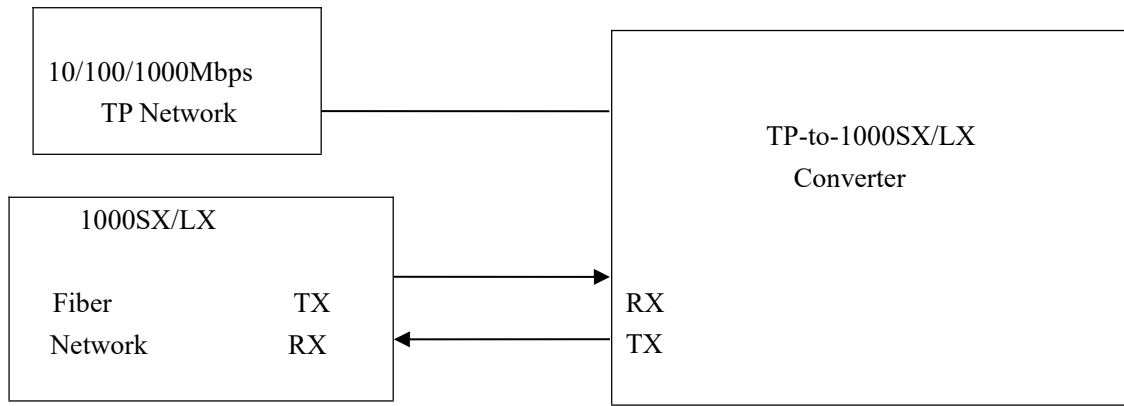


Fig.3 Basic Network Connection

5 Connecting To Gigabit Device

Converter TP Port	10/100/1000Mbps N way auto-negotiation 1000Mbps is option
Converter Fiber Port	1000Mbps full-duplex with N Way flow control. Link partner must be 1000Mbps full-duplex with N Way flow control

6. Cable Connection Parameter

. TP Cable Limitations: Cat.5 and up to 100m

. Fiber cable Limitations:

	Muliti-Mode Fiber 62.5/125 μ m		Muliti-Mode Fiber 50/125 μ m	
	Bandwidth MHz-Km	Distance	Bandwidth MHz-Km	Distance
1000SX	160	220m	400	500m
850nm	200	275m	500	550m
1000LX 1310nm	Single-Mode Fiber 9/125 μ m is up to 10km ~40km SC,FC single-mode are option			

850nm,1310nm is the wavelength lf fiber transceiver

7. TP-Fiber Technical Specifications

. Standards: IEEE802.3z/ab 10/100/1000B ase-T,
1000Base-SX/LX

Model	Fiber Connector Type
85 SC MM	SC multi mode 850nm
13 SC SM	SC single mode 1310nm
15 SC SM	SC single mode 1550nm
13 SC MM	SC multi mode 1310nm

The 1000Mbps fiber Transceivers:	
Type	Description
GTR20WA	single fiber bi-directional, TX 1310nm, RX 1550nm, 10M/100M/1000M, 20km
GTR20WB	single fiber bi-directional, TX 1550nm,RX 1310nm, 10M/100M/1000M, 20km

. UTP Cable: Cat.5 cable and up to 100m

. Fiber Cable:

1000SX: 62.5/125 or 50/125 μ m single-mode

1000LX: 9/125 μ m single-mode

. Data transfer Rate:

2000Mbps for full-duplex at 1000Mbps speed

. LED Indicators:

TP ACT, FDX, 1000/Link

Power, FX ACT, 1000/Link

. TP Flow Control : N Way auto-negotiation

Fiber Flow Control : N Way full-duplex mode

. Power Requirement : [1A@+5VDC](#)

. Ambient Temperature : 0° to 70°C

. Humidity : 5% to 90%

. Dimensions: 26(H)X 70(W) X 94(D)mm

Note: Connecting to Router, Bouter, Bridge, or Switch,

Please refer to the device`s Technical Manual.