10/1000Base-T to 1000Base-BX WDM Fiber Media Converters
20km~80km Reach, 1-RJ45 + 1-SC/ST/FC, Optional DIP switch

| Figure 1　Front Panel | Figure 2　Standard Rear Panel | Figure 3　DIP Rear Panel |

Overview

The MC-GSB11-xxxx Series are Gigabit Ethernet WDM Media Converters designed to convert 10/100/1000BASE-T copper to 1000BASE-BX single fiber. This media converter uses Wavelength-Division Multiplexing (WDM) technology, enabling Bi-Directional communication over a single fiber, doubling the capacity of your existing fiber infrastructure without having to install new cabling.

The single fiber WDM media converter is manufactured with latest IC packages from USA or Taiwan and high-quality fiber optical transceiver, which provides good electrical characteristics to ensure reliable data transmission and long working life. 6 Group LED indicated lights could fully monitor the working conditions of Media Converters. It is easy for end-users to observe network operation. This media converter provide external power as default, it can be as a stand-alone unit or inserted into Optcore's low-cost **14-slot Media Converter Rack Chassis** (part number: MC-RACK-14, sold separately) that allows all the media converters to be powered by a single internal power supply. The converter is provided with single SC, ST and FC connector option for different IT professionals.

Features

● Cost-effective migration from 10/100/1000Mbps copper to gigabit fiber

● Auto negotiation function allows UTP ports to auto select 10/100/1000M and Full Duplex or Half Duplex

● The UTP port supports the connection of MDI/MDI-X auto crossover

● Multiple fiber port could be chosen: SC, ST or FC

● Adopts WDM technology,transmitting and receiving data on a single fiber

● Single strand of single-mode Fiber: the max distance up to 80km

● Easy-to-view LED indicators provide status to monitor network activity easily

● Compacts size for easy installation and working with Optcore 14-Slot Rack-mount Chassis(MC-RACK-14)

● Optional DIP switch to allow end users select LFP functions

● RoHS compliant and Lead Free

● Default as external switching power

Technical Specifications

Product Series	10/100/1000BASE-T to 1000BASE-BX WDM Media Converter	Standards and Protocols	IEEE 802.3, IEEE 802.3u, IEEE802.3ab, IEEE802.3z
Ports	1 x 10/100/1000BASE-T RJ45 port 1 x 1000BASE-BX SC port (ST or FC also available)	Network Media	10/100/1000Base-T: Cat 5 UTP (maximum 100m) 1000Base-BX: Single-mode Fiber Cable (maximum 80km)
Flow control	Full Duplex: IEEE802.3x Half Duplex: back pressure	LED indicator	POWER (power) FX LINK (fiber link action) TP LINK1000 (twisted pair connection 1000M) TP LINK100 (twisted pair connection 100M) TP ACT (twisted pair packet forwarding action) FDX (Ethernet interface mode indicator, ON:Full duplex / OFF:Half duplex)
Buffer space	256KB	MAC address	4K
Wavelength	1310nm,1490nm or 1550nm (see order information)	Fiber Type	SMF
Power Supply	Input: AC 100~240V 50/60Hz Output: DC 5V 1A	Power Consumption	2.5W
Dimensions (WxDxH)	26×70×93mm	Net Weight	190 g (Excluding power adapter)
Environment	Operating: 0°C to 50°C, 10~90% RH Storage: -40°C to 70°C, 5~90% RH	Compliance	FDA IEC/EN 60825-1 RoHS, CE
Included in Package	1 - Fiber Media Converter 1 - Universal Power Adapter (EU/US/UK/CN/SA) 1 - Warranty Card 1 - Instruction Manual	Shipping (Package) Weight	0.4 kg

Ordering information

① *Standard Product*

Part number	Description
10/100/1000BASE-T to 1000Base-BX 20km WDM Single Fiber Media Converter	
MC-GSB11-A20C	10/100/1000BASE-T to 1000Base-BX Tx1310nm/Rx1550nm 20km Single Fiber WDM Media Converter (SC)
MC-GSB11-B20C	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1310nm 20km Single Fiber WDM Media Converter (SC)
MC-GSB11-A20T	10/100/1000BASE-T to 1000Base-BX Tx1310nm/Rx1550nm 20km Single Fiber WDM Media Converter (ST)
MC-GSB11-B20T	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1310nm 20km Single Fiber WDM Media Converter (ST)
MC-GSB11-A20F	10/100/1000BASE-T to 1000Base-BX Tx1310nm/Rx1550nm 20km Single Fiber WDM Media Converter (FC)
MC-GSB11-B20F	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1310nm 20km Single Fiber WDM Media Converter (FC)
10/100/1000BASE-T to 1000Base-BX 40km WDM Single Fiber Media Converter	
MC-GSB11-A40C	10/100/1000BASE-T to 1000Base-BX Tx1310nm/Rx1550nm 40km Single Fiber WDM Media Converter (SC)
MC-GSB11-B40C	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1310nm 40km Single Fiber WDM Media Converter (SC)
MC-GSB11-A40T	10/100/1000BASE-T to 1000Base-BX Tx1310nm/Rx1550nm 40km Single Fiber WDM Media Converter (ST)

MC-GSB11-B40T	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1310nm 40km Single Fiber WDM Media Converter (ST)
MC-GSB11-A40F	10/100/1000BASE-T to 1000Base-BX Tx1310nm/Rx1550nm 40km Single Fiber WDM Media Converter (FC)
MC-GSB11-B40F	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1310nm 40km Single Fiber WDM Media Converter (FC)
10/100/1000BASE-T to 1000Base-BX 80km WDM Single Fiber Media Converter	
MC-GSB11-A80C	10/100/1000BASE-T to 1000Base-BX Tx1490nm/Rx1550nm 80km Single Fiber WDM Media Converter (SC)
MC-GSB11-B80C	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1490nm 80km Single Fiber WDM Media Converter (SC)
MC-GSB11-A80T	10/100/1000BASE-T to 1000Base-BX Tx1490nm/Rx1550nm 80km Single Fiber WDM Media Converter (ST)
MC-GSB11-B80T	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1490nm 80km Single Fiber WDM Media Converter (ST)
MC-GSB11-A80F	10/100/1000BASE-T to 1000Base-BX Tx1490nm/Rx1550nm 80km Single Fiber WDM Media Converter (FC)
MC-GSB11-B80F	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1490nm 80km Single Fiber WDM Media Converter (FC)

② *With DIP switch function*

Part number	Description
10/100/1000BASE-T to 1000Base-BX 20km WDM Single Fiber Media Converter, with DIP switch	
MC-GSB11-A20C/DIP	10/100/1000BASE-T to 1000Base-BX Tx1310nm/Rx1550nm 20km Single Fiber Media Converter (SC),DIP
MC-GSB11-B20C/DIP	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1310nm 20km Single Fiber Media Converter (SC),DIP
MC-GSB11-A20T/DIP	10/100/1000BASE-T to 1000Base-BX Tx1310nm/Rx1550nm 20km Single Fiber Media Converter (ST),DIP
MC-GSB11-B20T/DIP	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1310nm 20km Single Fiber Media Converter (ST),DIP
MC-GSB11-A20F/DIP	10/100/1000BASE-T to 1000Base-BX Tx1310nm/Rx1550nm 20km Single Fiber Media Converter (FC),DIP
MC-GSB11-B20F/DIP	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1310nm 20km Single Fiber Media Converter (FC),DIP
10/100/1000BASE-T to 1000Base-BX 40km WDM Single Fiber Media Converter, with DIP switch	
MC-GSB11-A40C/DIP	10/100/1000BASE-T to 1000Base-BX Tx1310nm/Rx1550nm 40km Single Fiber Media Converter (SC),DIP
MC-GSB11-B40C/DIP	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1310nm 40km Single Fiber Media Converter (SC),DIP
MC-GSB11-A40T/DIP	10/100/1000BASE-T to 1000Base-BX Tx1310nm/Rx1550nm 40km Single Fiber Media Converter (ST),DIP
MC-GSB11-B40T/DIP	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1310nm 40km Single Fiber Media Converter (ST),DIP
MC-GSB11-A40F/DIP	10/100/1000BASE-T to 1000Base-BX Tx1310nm/Rx1550nm 40km Single Fiber Media Converter (FC),DIP
MC-GSB11-B40F/DIP	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1310nm 40km Single Fiber Media Converter (FC),DIP
10/100/1000BASE-T to 1000Base-BX 80km WDM Single Fiber Media Converter, with DIP switch	
MC-GSB11-A80C/DIP	10/100/1000BASE-T to 1000Base-BX Tx1490nm/Rx1550nm 80km Single Fiber Media Converter (SC),DIP
MC-GSB11-B80C/DIP	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1490nm 80km Single Fiber Media Converter (SC),DIP
MC-GSB11-A80T/DIP	10/100/1000BASE-T to 1000Base-BX Tx1490nm/Rx1550nm 80km Single Fiber Media Converter (ST),DIP
MC-GSB11-B80T/DIP	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1490nm 80km Single Fiber Media Converter (ST),DIP
MC-GSB11-A80F/DIP	10/100/1000BASE-T to 1000Base-BX Tx1490nm/Rx1550nm 80km Single Fiber Media Converter (FC),DIP
MC-GSB11-B80F/DIP	10/100/1000BASE-T to 1000Base-BX Tx1550nm/Rx1490nm 80km Single Fiber Media Converter (FC),DIP

⚠ **Warnings**

Process plug

The optical transceiver in the Ethernet Media Converter is supplied with a dust cover. This plug protects the optical

transceiver during standard manufacturing processes by preventing contamination from air borne particles. It is recommended that the dust cover remain in the transceiver whenever an optical fiber connector is not inserted.

Laser Safety

The Ethernet Media Converter is a Class 1 laser product per international standard IEC 60825-1. Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

For more product information, visit us on the web at www.optcore.net