10/100/1000Base-T to 1000Base-X Fiber Media Converters

850nm/1310nm/1550nm, 550m~120km 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-GS(M)A11-xxx Series is a Gigabit Ethernet Media Converter designed to convert 10/100/1000BASE-T copper to 1000BASE-X fiber optic. The Gigabit Ethernet media converter extends the distance of your network by interconnecting LAN devices that are physically separated by long distances, which provide you a simple and very cost-effective solution of connecting Gigabit Ethernet LANs over fiber optic. This fiber media converter provides 0.5km to 120 km transmit distance that depend on different transceiver types. It is provided with SC, ST and FC connector option for different users.

Manufactured with latest IC from uni and high-quality fiber optical transceiver, our Gigabit Ethernet Media Converter 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, which is easy for end-users to observe and diagnose the failure of network operation. This Gigabit Ethernet media converter provide external power as default, it can be used as a stand-alone unit or inserted into Optcore's low-cost **14-slot Media Converter Rack Chassis** (part number: MC-RACK-14) that allows all the media converters to be powered by a single internal power supply.

Features

● Cost-effective migration from Gigabit 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 ports could be chosen: SC, ST or FC

● Multi-mode or Single mode Fiber: the max distance up to 120km

● Supporting flow control

● 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)

● ROHS compliant and Lead Free

● Default as external switching power

Technical Specifications

Product Series	10/100/1000BASE-T Ethernet to 1000BASE-X Fiber 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-X SC port (ST or FC also available)	Network Media	10/100/1000Base-T: Cat 5 UTP (maximum 100m) 1000Base-EZX: Single-mode Fiber Cable (maximum 100km)
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	850nm, 1310nm or 1550nm (see order information)	Fiber Type	MMF or 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-SX Multi-mode 850nm 550m Fiber Media Converter	
MC-GMA11-05C	10/100/1000Base-T to 1000Base-SX Multi-mode 850nm 550m Media Converter (SC)
MC-GMA11-05T	10/100/1000Base-T to 1000Base-SX Multi-mode 850nm 550m Media Converter (ST)
MC-GMA11-05F	10/100/1000Base-T to 1000Base-SX Multi-mode 850nm 550m Media Converter (FC)
10/100/1000BASE-T to 1000BASE-LX Single Mode 1310nm 20km Fiber Media Converter	
MC-GSA11-20C	10/100/1000Base-T to 1000Base-LX Single Mode 1310nm 20km Media Converter (SC)
MC-GSA11-20T	10/100/1000Base-T to 1000Base-LX Single Mode 1310nm 20km Media Converter (ST)
MC-GSA11-20F	10/100/1000Base-T to 1000Base-LX Single Mode 1310nm 20km Media Converter (FC)
10/100/1000BASE-T to 1000BASE-EX Single Mode 1310nm 40km Fiber Media Converter	
MC-GSA11-40C	10/100/1000Base-T to 1000Base-EX Single Mode 1310nm 40km Media Converter (SC)
MC-GSA11-40T	10/100/1000Base-T to 1000Base-EX Single Mode 1310nm 40km Media Converter (ST)

MC-GSA11-40F	10/100/1000Base-T to 1000Base-EX Single Mode 1310nm 40km Media Converter (FC)
10/100/1000BASE-T to 1000BASE-ZX Single Mode 1550nm 80km Fiber Media Converter	
MC-GSA11-80C	10/100/1000Base-T to 1000Base-ZX Single Mode 1550nm 80km Media Converter (SC)
MC-GSA11-80T	10/100/1000Base-T to 1000Base-ZX Single Mode 1550nm 80km Media Converter (ST)
MC-GSA11-80F	10/100/1000Base-T to 1000Base-ZX Single Mode 1550nm 80km Media Converter (FC)
10/100/1000BASE-T to 1000BASE-EZX Single Mode 1550nm 100km Fiber Media Converter	
MC-GSA11-100C	10/100/1000Base-T to 1000Base-EZX Single Mode 1550nm 100km Media Converter (SC)
MC-GSA11-100T	10/100/1000Base-T to 1000Base-EZX Single Mode 1550nm 100km Media Converter (ST)
MC-GSA11-100F	10/100/1000Base-T to 1000Base-EZX Single Mode 1550nm 100km Media Converter (FC)
10/100/1000BASE-T to 1000BASE-EZX Single Mode 1550nm 120km Fiber Media Converter	
MC-GSA11-120C	10/100/1000Base-T to 1000Base-EZX Single Mode 1550nm 120km Media Converter (SC)
MC-GSA11-120T	10/100/1000Base-T to 1000Base-EZX Single Mode 1550nm 120km Media Converter (ST)
MC-GSA11-120F	10/100/1000Base-T to 1000Base-EZX Single Mode 1550nm 120km Media Converter (FC)

② *With DIP switch function*

Part number	Description
10/100/1000BASE-T to 1000BASE-SX Multi-mode 850nm 550m Fiber Media Converter, with DIP switch	
MC-GMA11-05C/DIP	10/100/1000Base-T to 1000Base-SX Multi-mode 850nm 550m Media Converter (SC),DIP
MC-GMA11-05T/DIP	10/100/1000Base-T to 1000Base-SX Multi-mode 850nm 550m Media Converter (ST),DIP
MC-GMA11-05F/DIP	10/100/1000Base-T to 1000Base-SX Multi-mode 850nm 550m Media Converter (FC),DIP
10/100/1000BASE-T to 1000BASE-LX Single Mode 1310nm 20km Fiber Media Converter, with DIP switch	
MC-GSA11-20C/DIP	10/100/1000Base-T to 1000Base-LX Single Mode 1310nm 20km Media Converter (SC),DIP
MC-GSA11-20T/DIP	10/100/1000Base-T to 1000Base-LX Single Mode 1310nm 20km Media Converter (ST),DIP
MC-GSA11-20F/DIP	10/100/1000Base-T to 1000Base-LX Single Mode 1310nm 20km Media Converter (FC),DIP
10/100/1000BASE-T to 1000BASE-EX Single Mode 1310nm 40km Fiber Media Converter, with DIP switch	
MC-GSA11-40C/DIP	10/100/1000Base-T to 1000Base-EX Single Mode 1310nm 40km Media Converter (SC),DIP
MC-GSA11-40T/DIP	10/100/1000Base-T to 1000Base-EX Single Mode 1310nm 40km Media Converter (ST),DIP
MC-GSA11-40F/DIP	10/100/1000Base-T to 1000Base-EX Single Mode 1310nm 40km Media Converter (FC),DIP
10/100/1000BASE-T to 1000BASE-ZX Single Mode 1550nm 80km Fiber Media Converter, with DIP switch	
MC-GSA11-80C/DIP	10/100/1000Base-T to 1000Base-ZX Single Mode 1550nm 80km Media Converter (SC),DIP
MC-GSA11-80T/DIP	10/100/1000Base-T to 1000Base-ZX Single Mode 1550nm 80km Media Converter (ST),DIP
MC-GSA11-80F/DIP	10/100/1000Base-T to 1000Base-ZX Single Mode 1550nm 80km Media Converter (FC),DIP
10/100/1000BASE-T to 1000BASE-EZX Single Mode 1550nm 100km Fiber Media Converter, with DIP switch	
MC-GSA11-100C/DIP	10/100/1000Base-T to 1000Base-EZX Single Mode 1550nm 100km Media Converter (SC),DIP
MC-GSA11-100T/DIP	10/100/1000Base-T to 1000Base-EZX Single Mode 1550nm 100km Media Converter (ST),DIP
MC-GSA11-100F/DIP	10/100/1000Base-T to 1000Base-EZX Single Mode 1550nm 100km Media Converter (FC),DIP
10/100/1000BASE-T to 1000BASE-EZX Single Mode 1550nm 120km Fiber Media Converter, with DIP switch	
MC-GSA11-120C/DIP	10/100/1000Base-T to 1000Base-EZX Single Mode 1550nm 120km Media Converter (SC),DIP
MC-GSA11-120T/DIP	10/100/1000Base-T to 1000Base-EZX Single Mode 1550nm 120km Media Converter (ST),DIP
MC-GSA11-120F/DIP	10/100/1000Base-T to 1000Base-EZX Single Mode 1550nm 120km 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