# EX-9543G-MM/SM User's Manual

10/100/1000Base-T to 1000Base SX/LX Fiber Optic Media Converter

fully compliant with the IEEE 802.3ab 1000Base-T /802.3az 1000Base SX/LX Standard



# 10/100/1000TX / 1000FX Fiber Optic Converter

It is a Gigabit Ethernet 10/100/1000Base-T to Fiber 1000Base-SX/LX Media converter, which is fully compliant with the IEEE 802.3ab / IEEE 802.3az standard, features one fiber port using SC / LC connector and one STP RJ-45 10/100/1000Base-T port. It supports conversion of Gigabit Ethernet port to fiber optic cabling. It is automatic for either full or half duplex mode. Full-duplex cabling provides bandwidth of up to 2Gbps and allows for transmission distance up to 550m over multi-mode fiber or up to 80 km over single-mode fiber.

EX-9543G-MM/SM supports Link Loss Carry Forward (LLCF) bi-direction Function, The Converter can detect and indicate the remote-side copper port or fiber port Link fails, and force TP and Fiber links down on both side, and when the Linkage was resumed, it will link again automatically.

EX-9543G-MM/SM also supports upto 9KBytes Jumbo frame packet to enhance network performance, and supports Green Ethernet power saving mode for copper port, It will detect Link status and cable length (for gigabit links only) and adjust power usage automatically.

### **Specifications**

- IEEE802.3 10Base-T / IEEE802.3u 100Base-TX / IEEE802.3ab1000Base-T/IEEE802.3z 1000Base-SX/LX IEEE802.3x Flow Control standards
- ..... RJ45 and SC connector (multi-mode)

Features STP and Fiber connector

Data Transfer Rate: 10/100Mbps(half duplex),
 20/200Mbps(Full duplex)
 1000/2000Mbps (Full duplex)

RJ45 and SC connector (single-mode)

- Auto-MDIX for 10/100/1000 STP port
- Support Store-and-Forward and Smart Pass-Through forward mode.
- Support upto 9K bytes Jumbo packet size.
- Support High-performance QoS functions
   Four Priority Queues per port
   Port-based, 802.1Q-based, DSCP-based
   IP-based, ACL-based priority
   Weighted round robin service
- Support 802.1x and 802.31D.
- TX Duplex Mode: Full or Half duplex mode ( default : Auto-Negotiation )
- LED: Power, speed, FX Link/Act, TX Link/Act and, LLCF.
- Power Requirement: Max. 2.5 Watt (external switching power adapter DC5V / 1.5A)

Ambient Temperature: 0°C to 40°C

Humidity: 5% to 90% RH(operating)

Dimension: 22(H) x 125(W) x 75 mm (L)

Cable:

UTP: Cat. 5 / Cat. 5e / Cat. 6 UTP/STP cable

Fiber: 1000Base-SX: 50/125um Multi-mode Fiber

optic cable, upto 220M, 62.5/125um multi-mode

Fiber optic cable, upto 550M.

1000Base-LX: 9/125um Single Mode Fiber

Optic cable . upto 120Km , It depends on the

Fiber transceiver.

## 10/100/1000TX / 1000FX Fiber Optic **Media Converter**

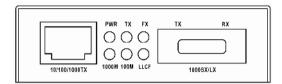
#### **Package Contents**

Before going any further, please make sure that you have the following parts in this package.

- One EX-9543G-MM/SM Fiber Optic converter
- One External AC to DC power adapter (5V DC 1.5A)
- One user's manual

NOTE: Please DO NOT use any other power adapter for EX-9543G-MM/SM.

#### Panel Contents:



EX-9543G-MM/SM Front Panel

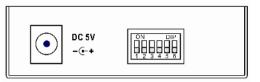
#### LED Indicator

LED	Mark	State	Description
POWER	PWR	ON	Power is received
		OFF	Power is not received
100Mbps speed	100M	ON	TP port work on 10M or 100M
1000Mbps	1000M	ON	TP port work on 1000M speed
TX Link/Act	TX	ON	A TX port good Link status has been established.
		Blinking	During Data Transfer or Receiving
FX Link/Act	FX	ON	A FX port good Link status has been established.
		Blinking	During Data Transfer or Receiving
LLCF	LLCF	ON	Remote Link Fails was detected

#### **Port Description:**

PORT	Mark	Description
Copper port	10/100/1000TX	It is connected to LAN card
		or connected to Switch
		hub.
Fiber port	1000SX/LX	It is connected to other end
		of Fiber Optic Transceiver.

<sup>\*\*</sup>Note: The TX port support Auto-negotiation for 10/100/1000M and Auto-MDI/MDIX capability.



#### EX-9543G-MM/SM Real Panel

#### **DIP Switches Setting:**

DIP 1	ON	Enable Jumbo packet 9k bytes Function			
DIP 2	ON	Enable Gigabit Green Function			
DIP 3	ON	Set Fiber port work on 100Base-FX mode			
		( depends on Fiber Transceiver)			
DIP 4	ON	Enable Link Loss Carry Forward LLCF Function			
DIP 5	ON	Enable Smart Pass Through Mode			
DIP 6	ON	Disable Fiber port Auto-Negotiation			

( All DIP Switches Default setting are OFF )

Warning: When the setting of DIP switches is changed, the power gas to be turned OFF and new setting will be effective after turned power ON again.

#### **Ordering Information:**

EX-9543G-MM : 10/100/1000TX to 1000Base-SX/LX

Media Converter

SC connector, Multi-mode 550M

EX-9543G-SM : 10/100/1000TX to 1000Base-SX/LX

Media Converter.

SC connector, Single-mode 10/40/60/80Km(optional)