

Overview

Thank you for purchasing PLANET MGB family SFP Mini-GBIC Gigabit Ethernet module. The MGB family SFP Mini-GBIC Gigabit Ethernet module can install into PLANET Switch products with SFP Mini-GBIC interface. The distance can be extended from 100 meters (TP), 550 meters (Multi-mode, LC), up to 120 kilometers (Single-mode, LC).



Class 1 Laser Product
Complies with FDA Regulation 21 CFR 1040.10 and 1040.11.



Class 1 radiation is present when the device or system is powered up.



Only trained and qualified personnel should be allowed to install or replace these modules.

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2. Checklist

Your MGB carton should contain the following items:

- The MGB family SFP Mini-GBIC Gigabit Ethernet Module
- This User's Manual

If any item is missing or damaged, please consult the dealer from whom you purchased your MGB family SFP Mini-GBIC Gigabit Ethernet module.

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3-2 1-Port 1000Base-SX / LX SFP Mini-GBIC Modules - MGB-SX / MGB-LX / MGB-L30 / MGB-L50 / MGB-L70 / MGB-L120

Features:

- Comply with the IEEE 802.3z Gigabit Ethernet standard
- 1 x 1000Mbps LC fiber port
- Plug and Play Installation
- 0 to 50 Degree C operation temperature



The MGB-L30, MGB-L50, MGB-L70 and MGB-L120 SFP transceivers provide the optical power budget from 19dB to 30dB. When shorter distance of single-mode fiber cables is used, you might need to insert an in-line optical attenuator in the link to avoid overloading of the transceiver.

SFP Model	MGB-L30	MGB-L50	MGB-L70	MGB-L120
In-line Optical Attenuator				
Fiber Cable Length ≤ 25Km	2-dB	10-dB	15-dB	25-dB
25Km < Fiber Cable Length < 50Km	--	--	8-dB	20-dB

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1. Model List

Your MGB family SFP Mini-GBIC Gigabit Ethernet module comes with one of the following models.

Gigabit Ethernet SFP Module List		
Model	Interface	Connector type and distance
MGB-GT	1000Base-T Module	RJ-45, 100m
MGB-SX	1000Base-SX Module	LC, MM, 550m
MGB-LX	1000Base-LX Module	LC, SM, 10km
MGB-L30	1000Base-LX Module	LC, SM, 30km
MGB-L50	1000Base-LX Module	LC, SM, 50km
MGB-L70	1000Base-LX Module	LC, SM, 70km
MGB-L120	1000Base-LX Module	LC, SM, 120km
MGB-LA10	1000Base-LX Module	LC WDM (TX:1310nm), SM, 10km
MGB-LB10	1000Base-LX Module	LC WDM (TX:1550nm), SM, 10km
MGB-LA20	1000Base-LX Module	LC WDM (TX:1310nm), SM, 20km
MGB-LB20	1000Base-LX Module	LC WDM (TX:1550nm), SM, 20km
MGB-LA40	1000Base-LX Module	LC WDM (TX:1310nm), SM, 40km
MGB-LB40	1000Base-LX Module	LC WDM (TX:1550nm), SM, 40km
MGB-TSX	1000Base-SX Module	LC, MM, 550m (-40~75°C)
MGB-TLX	1000Base-LX Module	LC, SM, 10km (-40~75°C)
MGB-TL30	1000Base-LX Module	LC, SM, 30km (-40~75°C)
MGB-TL70	1000Base-LX Module	LC, SM, 70km (-40~75°C)

Models with LX or last two numbered characters indicate the fiber-port is with "Single-Mode" optic fiber connector and the number indicates the maximum distance in km.

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3. Introduction

3-1 1-Port 1000Base-T SFP Mini-GBIC Module - MGB-GT

Features:

- Comply with IEEE 802.3ab Gigabit Ethernet standard
- 1 x 1000Base-T port (RJ-45 connector)
- Up to 100m over 4-pair UTP Cat.5/5e cable
- Plug & Play Installation
- 0 to 50 Degree C operation temperature

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3-3 1-Port 1000Base-LX WDM SFP Mini-GBIC Modules - MGB-LA10 / LB10, MGB-LA20 / LB20, MGB-LA40 / LB40

Features:

- Comply with the IEEE 802.3z Gigabit Ethernet standard
- 1 x 1000Mbps LC fiber port (single LC fiber connectors)
- Plug and Play Installation
- 0 to 50 Degree C operation temperature

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3-4 1-Port 1000Base-SX / LX SFP Mini-GBIC Modules - MGB-TSX / MGB-TLX / MGB-TL30 / MGB-TL70

Features:

- Comply with the IEEE 802.3z Gigabit Ethernet standard
- 1 x 1000Mbps LC fiber port
- Plug and Play Installation
- -40 to 75 Degree C operation temperature



The MGB-TL30 and MGB-TL70 SFP transceivers provide the optical power budget of 21dB and 24dB. When shorter distance of single-mode fiber cables is used, you might need to insert an in-line optical attenuator in the link to avoid overloading of the transceiver.

SFP Model	MGB-TL30	MGB-TL70
In-line Optical Attenuator		
Fiber Cable Length ≤ 25Km	2-dB	15-dB
25Km < Fiber Cable Length < 50Km	--	8-dB

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1. The fiber connector and distance support will be different by various models.
2. The MGB-LAxx / LBxx should runs in pair. It means you must connect MGB-LAxx in one end and another MGB-LBxx in the other end, for example LA10 to LB10 where only one single mode optic wire is required.
3. The MGB-LA10, MGB-LB10, MGB-LA20, MGB-LB20 and MGB-LA40, MGB-LB40 SFP transceivers provide the optical power budget from 12dB to 20dB. When shorter distance of single-mode fiber cables is used, you might need to insert an in-line optical attenuator in the link to avoid overloading of the transceiver.

SFP Model	MGB-LA10 MGB-LB10	MGB-LA20 MGB-LB20	MGB-LA40 MGB-LB40
In-line Optical Attenuator			
Fiber Cable Length ≤ 5Km	2-dB	6-dB	14-dB
5Km < Fiber Cable Length < 30Km	2-dB	---	4-dB

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4 Installing SFP Mini-GBIC Modules

4.1 Install the module

Please follow these steps to install the SFP Mini-GBIC modules:

1. Power on the Switch and place the Switch on a flat surface. Install the new SFP Mini-GBIC modules by inserting it into the slots and sliding it in until it stops (See **Figure 1**). Press it firmly until you feel the module snap into place. Never force, twist or bend the SFP Mini-GBIC modules. The SFP Mini-GBIC module slides in smoothly and the Switch will automatically detect the new module.

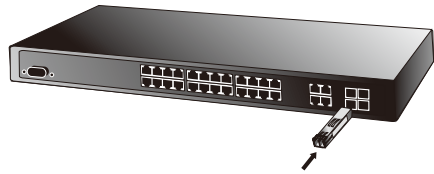


Figure 1: Insert the SFP Mini-GBIC modules

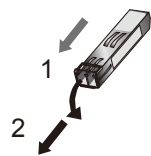
2. After the TP/fiber connection was built successfully. Check the LEDs to verify that if there is a link and a proper connection at the port.

Please refer to the Switch's user's manual for more about Switch or module's management.

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4.2 Remove the module

1. Make sure there is no network activity by consult or check with the network administrator. Or through the management interface of the switch (if available) to disable the port in advance.



2. Remove the UTP cable or the Fiber Optic Cable gently.
3. Turn the handle of the MGB module to horizontal.
4. Pull out the module gently through the handle.



Warning

Never pull out the module without pull the handle or the push bolts on the module. Direct pull out the module with violent could damage the module and the SFP module slot of the device.



Plug & Play | **SFP Mini-GBIC**
MGB-Series | **Gigabit Ethernet Transceiver**



User's Manual