1000BASE-SX/LX SFP Transceiver



The MGB family consists of Small Form Factor Pluggable (SFP) transceiver modules that are specifically designed for high performance integrated duplex data link over single mode optical fiber. These transceiver modules are compliant with the SFP Multisource Agreement (MSA) and hot pluggable. These modules offer an easy way to be installed in SFP MSA compliant ports at any time without the interruption of the host equipment operation.

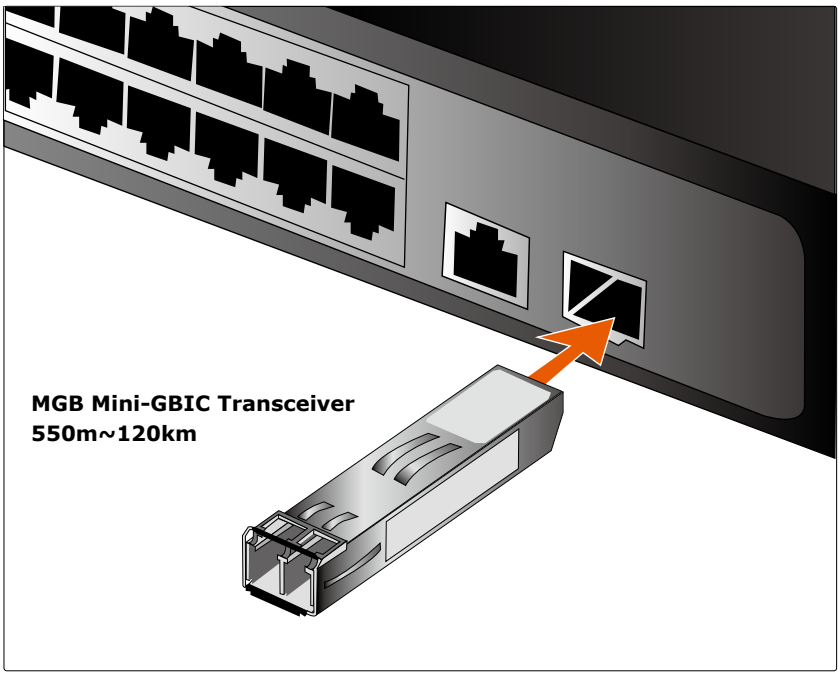
The MGB family of SFP Mini-GBIC Gigabit Ethernet modules can be installed in PLANET Switch products with SFP mini-GBIC interface. The deployment distance can be extended from 100 meters (TP) to 550 meters (Multi-mode, LC), and up to 120 kilometers (Single-mode, LC).

To meet the increasing demand of the Industrial Ethernet fiber solution, Planet releases the MGB-T series 1000BASE-SX/LX/BX transceivers that can operate reliably in electrically harsh, climatically demanding, and wide temperature range (-40°C to 75°C) environment. The MGB-T series 1000BASE-SX/LX/BX transceivers provide easy and fast 1000BASE-SX/LX/BX connection for Planet wide temperature industrial equipment.

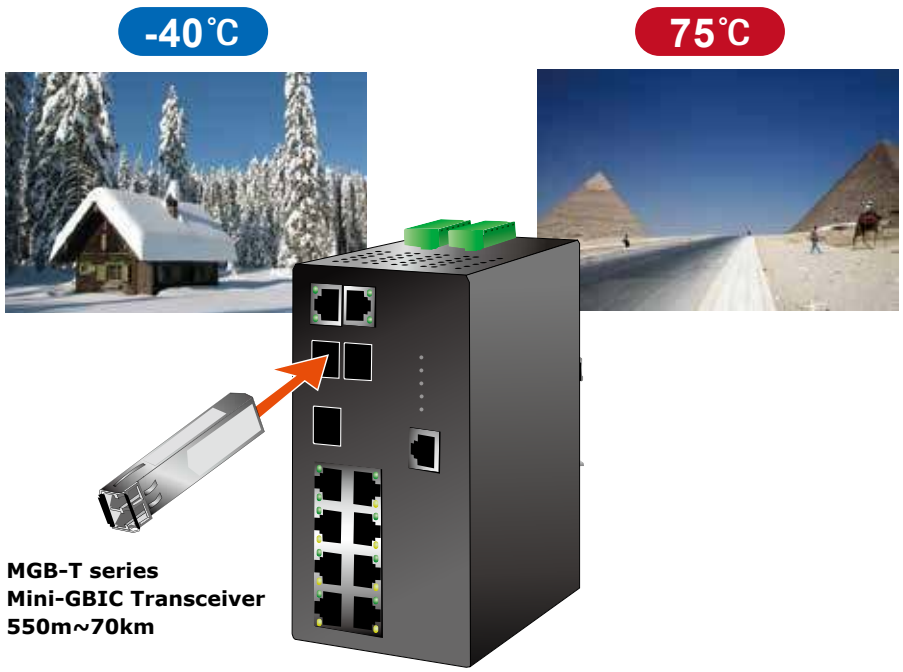
- Complies with the IEEE 802.3ab/802.3z Gigabit Ethernet standard
- 1 x 1000Mbps TP/LC fiber port
- Duplex/Single LC connector
- Differential PECL inputs and outputs
- Single power supply 3.3V
- TTL signal detect indicator
- Hot Pluggable
- Class 1 laser product complies with EN 60825-1
- Plug and Play Installation
- 0 to 60 degrees C operating temperature for MGB-GT/MGB-SX/MGB-SX2/MGB-LX/MGB-L40/MGB-L80/ MGB-L120/ MGB-LA10&MGB-LB10/MGB-LA20&MGB-LB20/MGB-LA40&MGB-LB40/MGB-LA80&MGB-LB80
- -40 to 75 degrees C operating temperature for MGB-TSX/MGB-TSX2/MGB-TLX/MGB-TL40/MGB-TL80/ MGB-TLA10&MGB-TLB10/MGB-TLA20&MGB-TLB20/ MGB-TLA40&MGB-TLB40/MGB-TLA80&MGB-TLB80

Applications

The MGB family of the SFP Gigabit Ethernet module can be installed into PLANET Switch and Media Converter products with 1000BASE-SX/LX/BX SFP interface. The deployment distance can be extended from 550m (Multi-mode, LC) to up to 120 kilometers (Single-mode, LC). The SFP transceivers are hot-pluggable and hot-swappable. You can plug in and pull out the transceivers to/from any SFP port without having to power off the Switch/Media Converter.



The MGB-T series 1000BASE-SX/LX/BX transceiver is an ideal solution for -40°C to 75°C wide temperature industrial equipment with 1000BASE-SX/LX/BX SFP interfaces. The deployment distance can be extended from 550m (Multi-mode, LC) to 10/20/40/80 kilometers (Single-mode, LC).



Specifications

Product	MGB-GT
PHY Type	IEEE 802.3ab 1000BASE-T
Connector	Copper
Maximum Distance	100m
Operating Temperature	0~60 degrees C
Product	MGB-SX
PHY Type	IEEE 802.3z 1000BASE-SX
Fiber Type	Multi-mode
Connector	LC
DDM	Yes
Wavelength	850nm
Maximum Distance	550m
Operating Temperature	0~60 degrees C
Product	MGB-SX2
PHY Type	IEEE 802.3z 1000BASE-SX
Fiber Type	Multi-mode
Connector	LC
DDM	Yes
Wavelength	1310nm
Maximum Distance	2km
Operating Temperature	0~60 degrees C
Product	MGB-LX
PHY Type	IEEE 802.3z 1000BASE-LX
Fiber Type	Single-mode
Connector	LC
DDM	Yes
Wavelength	1310nm
Maximum Distance	20km
Operating Temperature	0~60 degrees C
Product	MGB-L40
PHY Type	IEEE 802.3z 1000BASE-LX
Fiber Type	Single-mode
Connector	LC
DDM	YES
Wavelength	1310nm
Maximum Distance	40km
Operating Temperature	0~60 degrees C
Product	MGB-L80
PHY Type	IEEE 802.3z 1000BASE-LX
Fiber Type	Single-mode
Connector	LC
DDM	YES
Wavelength	1550nm
Maximum Distance	80km
Operating Temperature	0~60 degrees C
Product	MGB-L120
PHY Type	IEEE 802.3ae 10 Gigabit Ethernet Standard
Fiber Type	Single-mode
Connector	LC
DDM	Yes
Wavelength	1550
Maximum Distance	120km
Operating Temperature	0~60 degrees C
Product	MGB-TSX
PHY Type	IEEE 802.3z 1000BASE-SX
Fiber Type	Multi-mode
Connector	LC
DDM	Yes
Wavelength	850nm
Maximum Distance	550m
Operating Temperature	-40~75 degrees C

Product	MGB-TSX2
PHY Type	IEEE 802.3z 1000BASE-SX
Fiber Type	Multi-mode
Connector	LC
DDM	Yes
Wavelength	1310nm
Maximum Distance	2km
Operating Temperature	-40~75 degrees C
Product	MGB-TLX
PHY Type	IEEE 802.3z 1000BASE-LX
Fiber Type	Single-mode
Connector	LC
DDM	Yes
Wavelength	1310nm
Maximum Distance	20km
Operating Temperature	-40~75 degrees C
Product	MGB-TL40
PHY Type	IEEE 802.3z 1000BASE-LX
Fiber Type	Single-mode
Connector	LC
DDM	Yes
Wavelength	1310nm
Maximum Distance	40km
Operating Temperature	-40~75 degrees C
Product	MGB-TL80
PHY Type	IEEE 802.3z 1000BASE-LX
Fiber Type	Single-mode
Connector	LC
DDM	Yes
Wavelength	1550nm
Maximum Distance	80km
Operating Temperature	-40~75 degrees C
Product	MGB-LA10 and MGB-LB10
PHY Type	IEEE 802.3z 1000BASE-BX
Fiber Type	Single-mode
Connector	LC
DDM	Yes
Wavelength	MGB-LA10: TX1310nm, RX1550nm MGB-LB10: TX1550nm, RX1310nm
Maximum Distance	10km
Operating Temperature	0~60 degrees C
Product	MGB-LA20 and MGB-LB20
PHY Type	IEEE 802.3z 1000BASE-BX
Fiber Type	Single-mode
Connector	LC
DDM	Yes
Wavelength	MGB-LA20: TX1310nm, RX1550nm MGB-LB20: TX1550nm, RX1310nm
Maximum Distance	20km
Operating Temperature	0~60 degrees C
Product	MGB-LA40 and MGB-LA40
PHY Type	IEEE 802.3z 1000BASE-BX
Fiber Type	Single-mode
Connector	LC
DDM	Yes
Wavelength	MGB-LA40: TX1310nm, RX1550nm MGB-LB40: TX1550nm, RX1310nm
Maximum Distance	40km
Operating Temperature	0~60 degrees C
Product	MGB-LA80 and MGB-LB80
PHY Type	IEEE 802.3z 1000BASE-BX
Fiber Type	Single-mode
Connector	LC

DDM	Yes
Wavelength	MGB-LA80: TX1490nm, RX1550nm MGB-LB80: TX1550nm, RX1490nm
Maximum Distance	80km
Operating Temperature	0~60 degrees C
Product	MGB-TLA10 and MGB-TLB10
PHY Type	IEEE 802.3z 1000BASE-BX
Fiber Type	Single-mode
Connector	LC
DDM	YES
Wavelength	MGB-TLA10: TX1310nm, RX1550nm MGB-TLB10: TX1550nm, RX1310nm
Maximum Distance	10km
Operating Temperature	-40~75 degrees C
Product	MGB-TLA20 and MGB-TLB20
PHY Type	IEEE 802.3z 1000BASE-BX
Fiber Type	Single-mode
Connector	LC
DDM	YES
Wavelength	MGB-TLA20: TX1310nm, RX1550nm MGB-TLB20: TX1550nm, RX1310nm
Maximum Distance	20km
Operating Temperature	-40~75 degrees C
Product	MGB-TLA40 and MGB-TLA40
PHY Type	IEEE 802.3z 1000BASE-BX
Fiber Type	Single-mode
Connector	LC
DDM	YES
Wavelength	MGB-TLA40: TX1310nm, RX1550nm MGB-TLB40: TX1550nm, RX1310nm
Maximum Distance	40km
Operating Temperature	-40~75 degrees C
Product	MGB-TLA80 and MGB-TLB80
PHY Type	IEEE 802.3z 1000BASE-BX
Fiber Type	Single-mode
Connector	LC
DDM	YES
Wavelength	MGB-TLA80: TX1490nm, RX1550nm MGB-TLB80: TX1550nm, RX1490nm
Maximum Distance	80km
Operating Temperature	-40~75 degrees C

Ordering Information

MGB-GT	SFP-Port 1000 BASE-T Module
MGB-LX	SFP-Port 1000 BASE-LX mini-GBIC module - 20km
MGB-SX	SFP-Port 1000 BASE-SX mini-GBIC module - 550m
MGB-SX2	SFP-Port 1000 BASE-SX mini-GBIC module - 2km
MGB-L40	SFP-Port 1000 BASE-LX mini-GBIC module - 40km
MGB-L80	SFP-Port 1000 BASE-LX mini-GBIC module - 80km
MGB-L120	SFP-Port 1000 BASE-LX mini-GBIC module - 120km
MGB-LA10 MGB-LB10	SFP-Port 1000 BASE-BX (WDM, TX:1310nm) mini-GBIC module - 10km SFP-Port 1000 BASE-BX (WDM, TX:1550nm) mini-GBIC module - 10km
MGB-LA20 MGB-LB20	SFP-Port 1000 BASE-BX (WDM, TX:1310nm) mini-GBIC module - 20km SFP-Port 1000 BASE-BX (WDM, TX:1550nm) mini-GBIC module - 20km
MGB-LA40 MGB-LB40	SFP-Port 1000 BASE-BX (WDM, TX:1310nm) mini-GBIC module - 40km SFP-Port 1000 BASE-BX (WDM, TX:1550nm) mini-GBIC module - 40km
MGB-LA80	SFP-Port 1000 BASE-BX (WDM, TX:1490nm) mini-GBIC module - 80km
MGB-LB80	SFP-Port 1000 BASE-BX (WDM, TX:1550nm) mini-GBIC module - 80km

MGB-TSX	SFP-Port 1000 BASE-SX mini-GBIC module - 550m (-40~75°C)
MGB-TSX2	SFP-Port 1000 BASE-SX mini-GBIC module – 2km (-40~75°C)
MGB-TLX	SFP-Port 1000 BASE-LX mini-GBIC module - 20km (-40~75°C)
MGB-TL40	SFP-Port 1000 BASE-LX mini-GBIC module - 40km (-40~75°C)
MGB-TL80	SFP-Port 1000 BASE-LX mini-GBIC module - 80km (-40~75°C)
MGB-TLA10 MGB-TLB10	SFP-Port 1000 BASE-BX (WDM, TX:1310nm) mini-GBIC module - 10km (-40~75°C) SFP-Port 1000 BASE-BX (WDM, TX:1550nm) mini-GBIC module - 10km (-40~75°C)
MGB-TLA20 MGB-TLB20	SFP-Port 1000 BASE-BX (WDM, TX:1310nm) mini-GBIC module - 20km (-40~75°C) SFP-Port 1000 BASE-BX (WDM, TX:1550nm) mini-GBIC module - 20km (-40~75°C)
MGB-TLA40 MGB-TLB40	SFP-Port 1000 BASE-BX (WDM, TX:1310nm) mini-GBIC module - 40km (-40~75°C) SFP-Port 1000 BASE-BX (WDM, TX:1550nm) mini-GBIC module - 40km (-40~75°C)
MGB-TLA80 MGB-TLB80	SFP-Port 1000 BASE-BX (WDM, TX:1490nm) mini-GBIC module - 80km (-40~75°C) SFP-Port 1000 BASE-BX (WDM, TX:1550nm) mini-GBIC module - 80km (-40~75°C)

PLANET Technology Corporation

11F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)
Tel: 886-2-2219-9518 Fax: 886-2-2219-9528
Email: sales@planet.com.tw www.planet.com.tw

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