2-Port 10G/2.5G/1G/100BASE-X SFP+ Media Converter

High Performance, Flexibility, and Reliability

PLANET XT-815A is a commercial-grade 2-Port 10G/2.5G/1GBASE-X and 100BASE-FX SFP+ media converter designed for the networks that require high-speed transmission over fiber cabling. Suitable for enterprise backbone, hospital, campus and telecom infrastructures, the XT-815A delivers robust performance and versatility for a wide range of applications.

Versatile Features to Meet Diverse Networking Needs

The XT-815A provides broad bandwidth and powerful processing capacity. Its dual fiber-optic 10GBASE-X SFP+ interfaces support multiple speeds like 10GBASE-SR/LR, 2500BASE-X, 1000BASE-SX/LX and 100BASE-FX to enable the administrator to choose a suitable SFP/SFP+ transceiver based on distance or speed requirements. It also supports flexible conversion between multi-mode and single-mode fiber, extending transmission distances from 300 meters to 80 kilometers using 10GBASE-SR or 10GBASE-LR SFP+ modules.

■ **10**GBASE-X fiber to **2.5G/1G/100**BASE-X fiber
■ **Multi-mode** fiber to **Single mode** fiber
■ **Duplex** fiber to **Simplex** fiber
■ **10Gbps XGSPON/2.5Gbps GPON** fiber-optic networking to **10Gbps** Ethernet fiber-optic networking

Its dual ports connect to servers, switches, storage systems, and wireless access points. The XT-815A also supports 10GPON to 10Gbps Ethernet bridging, making it suitable for data center cloud computing, enterprise backbone networks, and inter-building deployments.
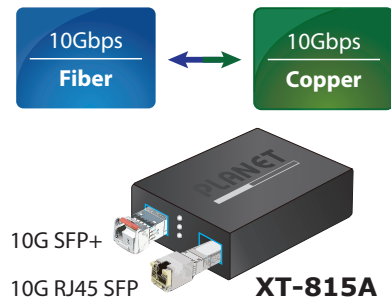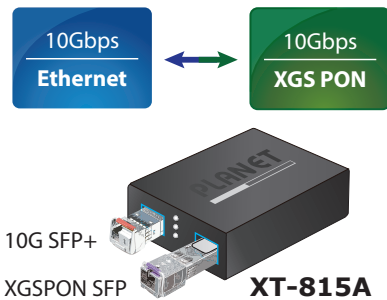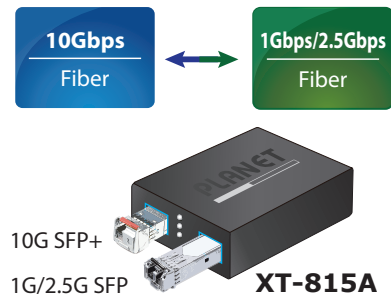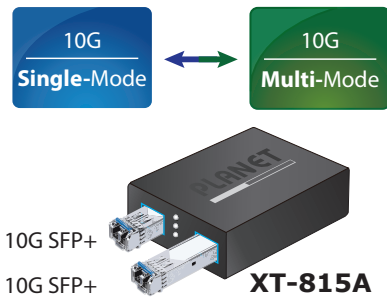
Physical Port

• Media conversion between 10GBASE-X SFP+, 2.5GBASE-X, 1000BASE-X, and 100BASE-FX fiber optic
• Dual 10GBASE-X SFP+ fiber optic ports supporting
  – Multi-mode fiber with LC connector
  – Single-mode fiber with LC connector
• SFP transceivers support auto-detection for 10G/2.5G/1G/100Mbps

Layer 2 Features

• Fully compliant with IEEE 802.3ae/bz/an Ethernet standards
• Non-blocking full wire-speed forwarding performance
• 12K jumbo frame support for handling large data transmissions
• Transparent IEEE 802.1Q VLAN tagging and multicast pass-through
• IEEE 802.3x full-duplex flow control and back-pressure for packet loss prevention

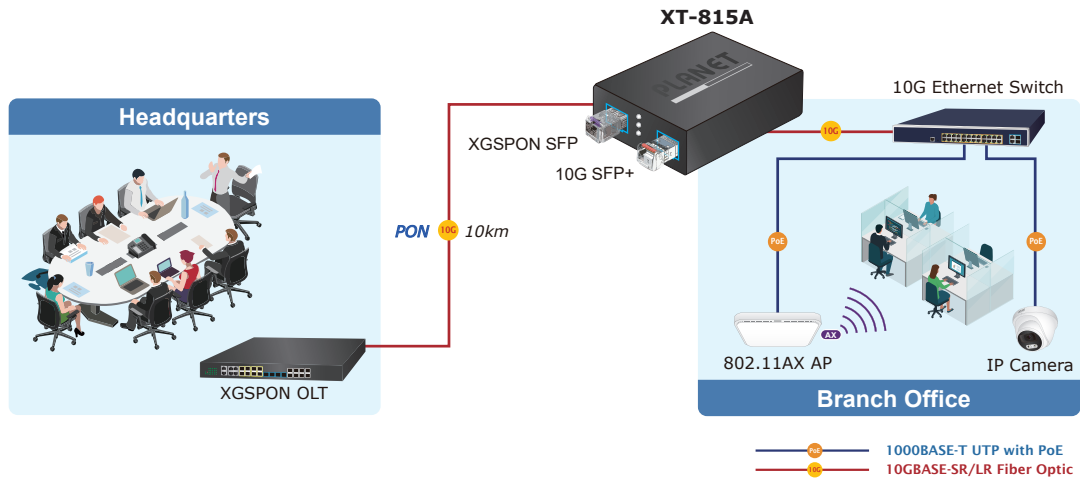## Mechanical Features

• Durable metal casing for enhanced reliability
• LED indicators to facilitate network diagnostics
• Compact size and Plug-and-Play installation
• External 5V DC, 2A power input socket
• Wall mounting or DIN-rail installation (optional)
• 0 to 50 degrees C operating temperature
• Compatible with PLANET 10"/19" Media Converter Chassis (MC-700/MC-1500/MC-1500R/MC-1500R48).

| 10G Single-Mode | ⟷ | 10G Multi-Mode |

10G SFP+
10G SFP+
XT-815A

| 10Gbps Fiber | ⟷ | 1Gbps/2.5Gbps Fiber |

10G SFP+
1G/2.5G SFP
XT-815A

| 10Gbps Ethernet | ⟷ | 10Gbps XGS PON |

10G SFP+
XGSPON SFP
XT-815A

| 10Gbps Fiber | ⟷ | 10Gbps Copper |

10G SFP+
10G RJ45 SFP
XT-815A

Two Fiber Optic Ports Double the Distance of Deployment

The XT-815A offers two 10G fiber ports, which can be used for single mode and multimode conversion, as well as for converting between PON and Ethernet. Since both ports are fiber optic, the transmission distance can reach up to 120km on both ends, significantly extending the service coverage.

XT-815A

10G Ethernet Switch

Headquarters

XGSPON SFP
10G SFP+

PON 10G 10km

XGSPON OLT

802.11AX AP

IP Camera

Branch Office

1000BASE-T UTP with PoE
10GBASE-SR/LR Fiber Optic

## Stable and Efficient Chipset with High Network Performance

The XT-815A features built-in 2-Port 10GBASE-X SFP+ interfaces, ensuring stable data transmission. It provides a 40Gbps switching fabric and 12K jumbo frame support, enabling seamless handling of large data traffic. Additionally, the 4K MAC address table and VLAN pass-through functionality enhance network management efficiency.

Flexible Deployment and High Compatibility

The XT-815A can be used as a standalone device or as a module in PLANET MC-series media converter chassis (e.g., MC-1500R), facilitating centralized fiber network management. With multi-rate auto-detection (10G/2.5G/1G/100Mbps) and compatibility with standard SFP/SFP+ modules, the XT-815A adapts to various networking requirements. Its compact design and LED indicators simplify installation and network diagnostics.

Optional installation method

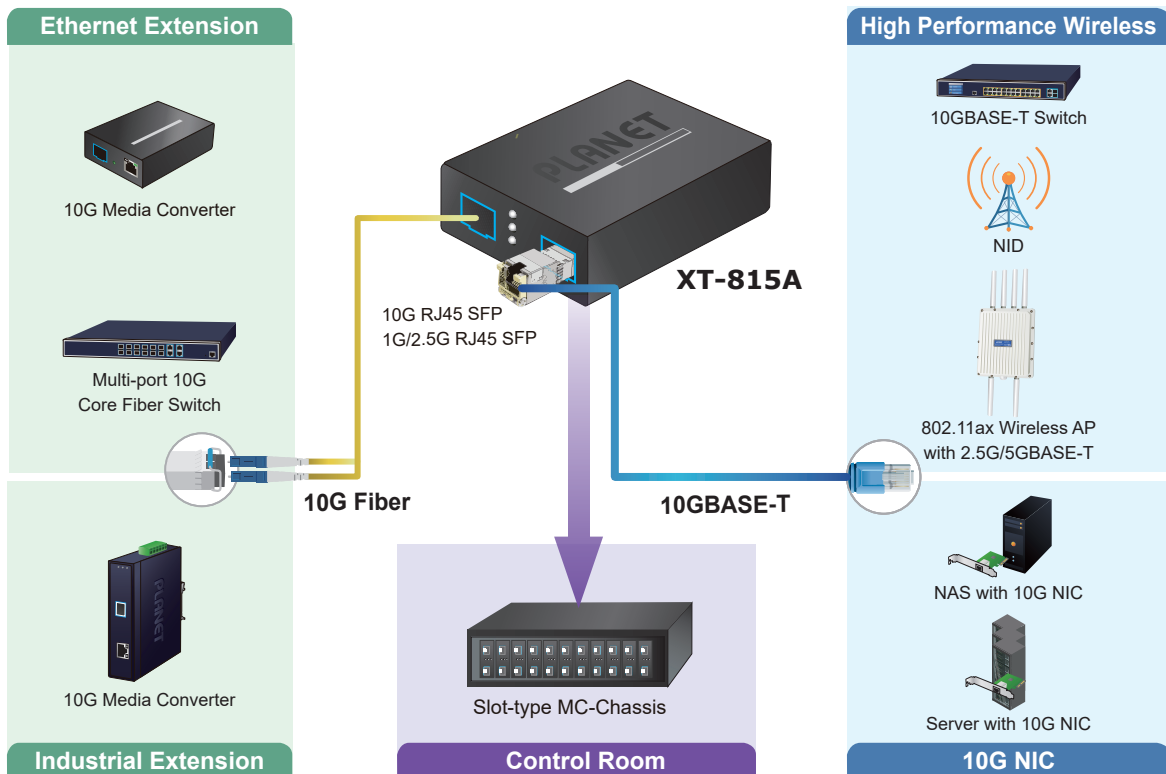| Media Chassis Installation | DIN-rail Installation | Wall-mount Installation |
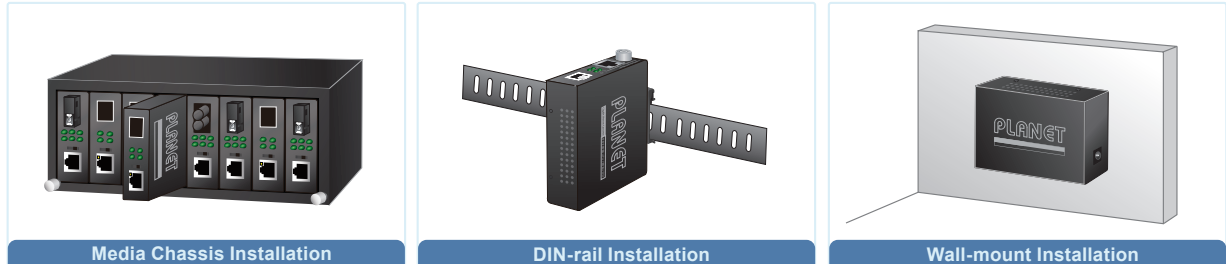
* The above pictures are for illustration only.

Applications

Ideal Applications for Enhanced Network Efficiency and Flexibility

The XT-815A is perfect for network deployments with high bandwidth demands, including fast data transmission in data centers, efficient operations in enterprise backbones, long-distance fiber extension over kilometers, and telecom FTTH/FTTC network construction. Its easy installation and high-performance capabilities make the XT-815A an ideal choice for businesses and service providers alike.

Thus, networks can be upgraded with the XT-815A for achieving 10G high speed, flexibility, and reliability.

10Gbps Fiber Media Converter Application

Ethernet Extension

10G Media Converter

Multi-port 10G
Core Fiber Switch

High Performance Wireless

10GBASE-T Switch

NID

802.11ax Wireless AP
with 2.5G/5GBASE-T

10G RJ45 SFP
1G/2.5G RJ45 SFP

XT-815A

10G Fiber

10GBASE-T

10G Media Converter

Industrial Extension

Slot-type MC-Chassis

Control Room

NAS with 10G NIC

Server with 10G NIC

10G NIC

Perfect Applications for Advanced Networks

The XT-815A is ideal for environments that demand high-performance, long-distance, and reliable networking solutions. With its 10G data transmission capabilities and easy installation, it is perfectly suited for deploying FTTH (Fiber to the Home) and FTTC (Fiber to the Curb) networks for ISPs, as well as FTTB (Fiber to the Building) networks for small- to medium-sized enterprises.

Additionally, its ability to bridge 10GPON to 10G Ethernet and support a wide range of fiber transmission distances makes it a powerful tool for enterprise backbones, data centers, and campus-wide network extensions. Whether extending connectivity across a city or ensuring seamless data transmission within an enterprise, the XT-815A offers the flexibility and performance needed for modern network demands.

Data Center

Campus

XT-815A

Enterprise

Carrier Infrastructure
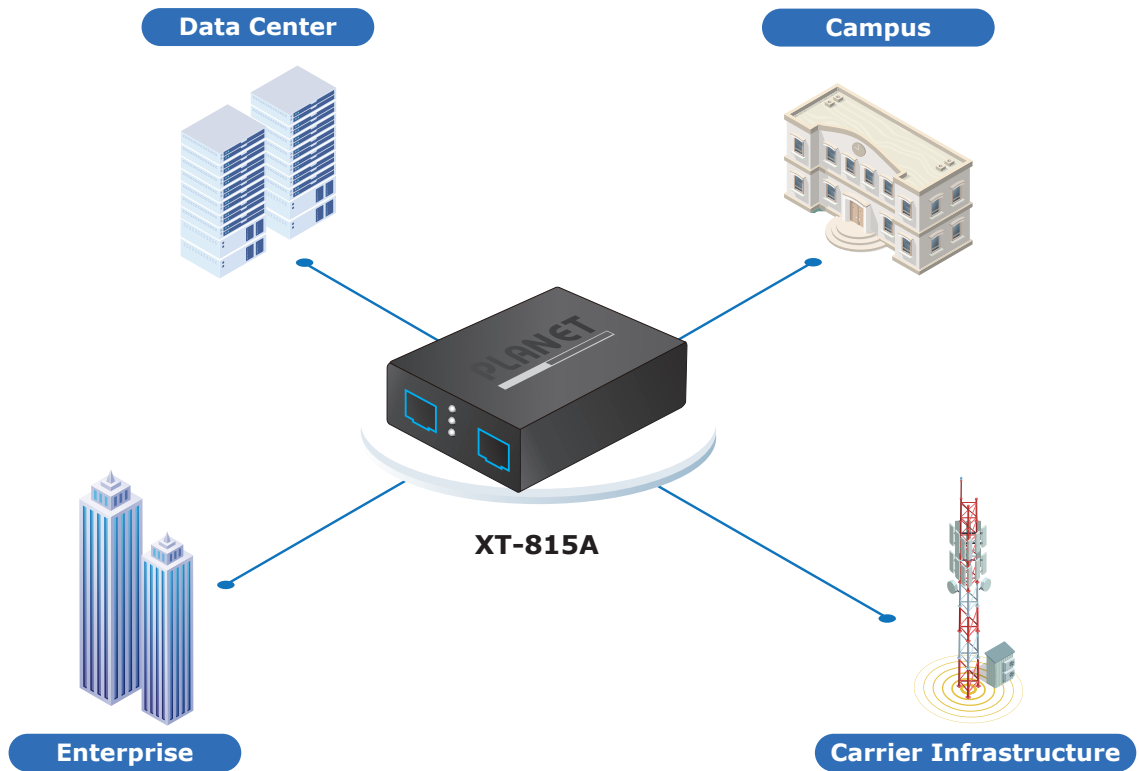
Specifications

Model	XT-815A
Hardware Specifications	
SFP+ Port	Dual 10GBASE-X SFP+ interfaces Backward compatible with 100BASE-FX, 1000BASE-X and 2500BASE-X SFP transceivers
Fiber Mode	May vary on SFP+/SFP Module
Fiber Port Type (connector)	SFP, LC type
Fiber Maximum Distance	May vary on SFP Module
Network Cables	May vary on SFP+ and SFP modules
Enclosure	Metal case
Dimensions (W x D x H)	94 x 70.3 x 26.2 mm
Weight	195g
Power Supply	DC 5V, 2A Power Socket, external AC-to-DC adapter
Installation	Wall-mount or DIN-rail installation (optional)
LED	System: PWR (Green) SFP+ Port: 2.5Gbps/1Gbps LNK/ACT(Green) 10Gbps /100Mbps LNK/ACT(Amber)
Layer 2 Features	
Switch Architecture	Store-and-Forward
Fabric	40Gbps backbone to ensure high-speed data transmission
Forwarding Rate	Non-blocking, full wire-speed forwarding rate
Flow Control	Half duplex: Back pressure eliminates packet loss Full duplex: IEEE 802.3x pause frame support for efficient flow control
Maximum Frame Size	Supports jumbo frames up to 12K
VLAN Support	Transparent 802.1Q VLAN pass-through for seamless integration in tagged network environments
Priority Switching	8-level QoS priority switching for traffic optimization Supports 802.1p priority for efficient traffic management
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE
Protocols and Standards Compliance	IEEE 802.3z Gigabit SX/LX IEEE 802.3ae 10 Gigabit Ethernet IEEE 802.3x Flow Control IEEE 802.3az Energy Efficient Ethernet IEEE 802.1p Class of Service
Environment	
Temperature	Operating: 0 ~ 50 degrees C Storage: -10 ~ 70 degrees C
Humidity	5% ~ 95% non-condensing

Dimensions

XT-815A
10 Gigabit Ethernet Converter

10G/2.5G/1G/100
100/10G
1G/2.5G
PWR

1
2
1
2

26.20

70.30

60.61

12.69

PLANET

10 Gigabit Ethernet *Dual 10G/2.5G/1G/100BASE-X*

94.00

5V DC

Ø7.00

4.00

46.70
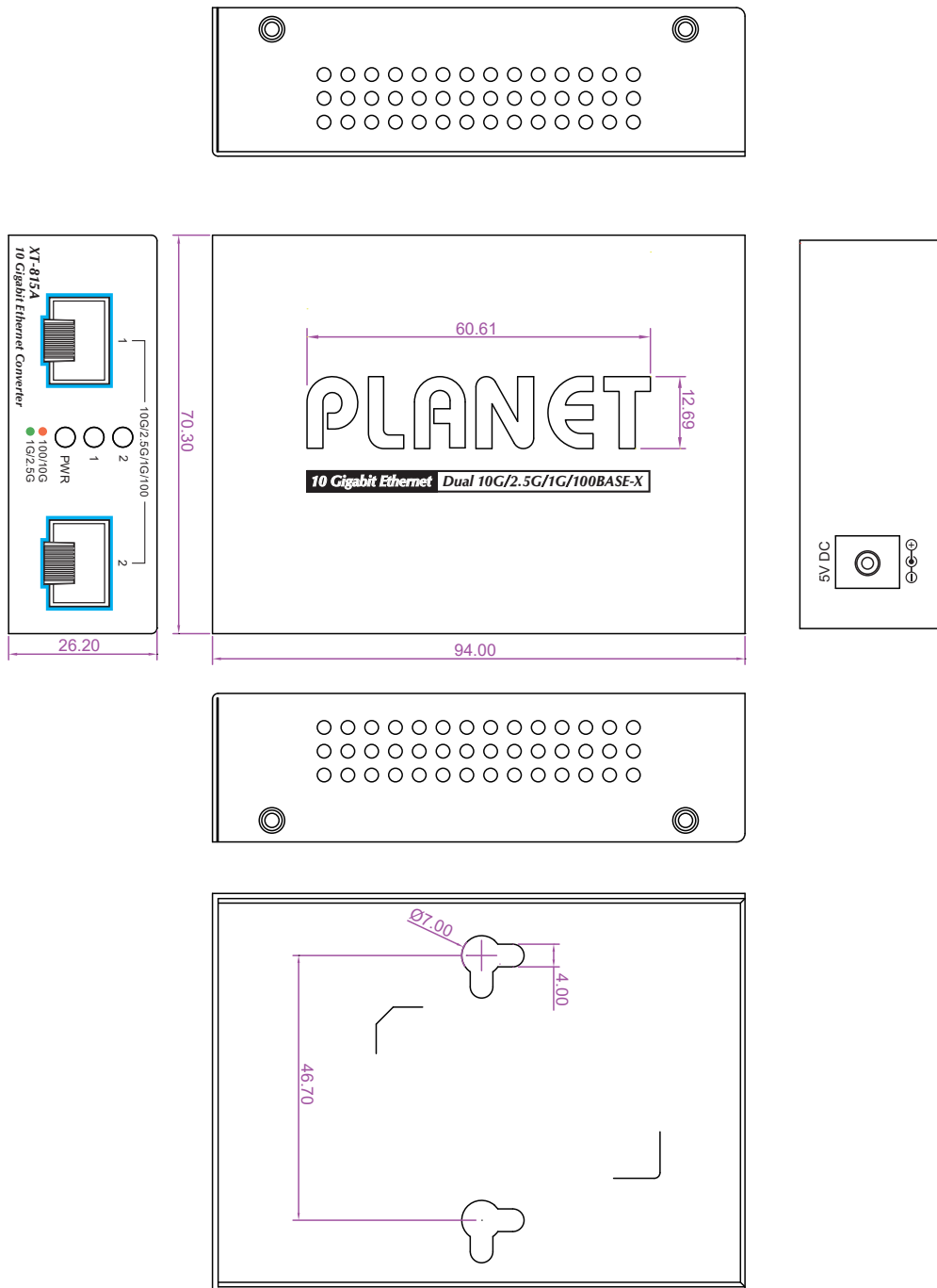
Dimensions (W x D x H): 94 x 70.3 x 26.2 mm

Ordering Information

XT-815A	2-Port 10G/2.5G/1G/100BASE-X SFP+ Media Converter

Related Products

XT-705A	10G/5G/2.5G/1G/100M Copper to 10GBASE-X SFP+ Media Converter
XT-715A	10GBASE-T to 10GBASE-X SFP+ Media Converter
XT-905A	1-Port 10G/5G/2.5G/1G/100BASE-T + 1-Port 10G/1GBASE-X SFP+ Managed Media Converter
XT-915A	2-Port 10G/1GBASE-X SFP+ Managed Media Converter
XT-925A	1-Port 10G/5G/2.5G/1G/100BASE-T + 2-Port 10G/1GBASE-X SFP+ Managed Media Converter
IXT-900-2X1T	Industrial 2-Port 10GBASE-X SFP+ + 1-Port 10GBASE-T Managed Media Converter
IXT-900-2X	Industrial 2-Port 10GBASE-X SFP+ Managed Media Converter
IXT-900-2X1PD	Industrial 2-Port 10GBASE-X SFP+ + 1-Port 10GBASE-T PoE PD Managed Media Converter
IXT-900-1X1T	Industrial 1-Port 10GBASE-X SFP+ + 1-Port 10GBASE-T Managed Media Converter
IXT-900-1X1UP	Industrial 1-Port 10G SFP+ + 1-Port 10GBASE-T 802.3bt PoE++ Managed Media Converter
IXT-900-2X1UP	Industrial 2-Port 10G SFP+ + 1-Port 10GBASE-T 802.3bt PoE++ Managed Media Converter

Available 10Gbps SFP+ Modules

MTB-LB40	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 40km (TX:1330nm RX:1270nm)
MTB-LA40	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 40km (TX:1270nm RX:1330nm)
MTB-LB20	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 20km (TX:1330nm RX:1270nm)
MTB-LA20	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 20km (TX:1270nm RX:1330nm)
MTB-TSR	1-Port 10GBASE-SR SFP+ Fiber Optic Module - 300m (-40~85 degrees C)
MTB-TLR	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 10km (-40~85 degrees C)
MTB-SR	1-Port 10GBASE-SR SFP+ Fiber Optic Module - 300m
MTB-LR	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 10km
MTB-LA60	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 60km (TX:1270nm RX:1330nm)
MTB-LB60	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 60km (TX:1330nm RX:1270nm)
MTB-RJ	1-Port 10GBASE-T SFP+ Copper Fiber Optic Module - 30m
MTB-LR40	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 40km
MTB-TLR40	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 40km (-40~85 degrees C)
MTB-SR2	1-Port 10GBASE-LR SFP+ Fiber Optic Module – 2km
MTB-LR20	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 20km
MTB-LR60	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 60km
MTB-LR80	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 80km
MTB-TSR2	1-Port 10GBASE-LR SFP+ Fiber Optic Module – 2km (-40~85 degrees C)
MTB-TLR20	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 20km (-40~85 degrees C)
MTB-TLR60	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 60km (-40~85 degrees C)
MTB-TLA20	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 20km (TX:1270nm RX:1330nm) (-40~85 degrees C)
MTB-TLB20	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 20km (TX:1330nm RX:1270nm) (-40~85 degrees C)
MTB-TLA40	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 40km (TX:1270nm RX:1330nm) (-40~85 degrees C)
MTB-TLB40	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 40km (TX:1330nm RX:1270nm) (-40~85 degrees C)
MTB-TLA60	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 60km (TX:1270nm RX:1330nm) (-40~85 degrees C)
MTB-TLB60	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 60km (TX:1330nm RX:1270nm) (-40~85 degrees C)
MTB-LA10	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 10km (TX:1270nm RX:1330nm)
MTB-LB10	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 10km (TX:1330nm RX:1270nm)

Available 2.5Gbps SFP Modules

MGB-2GTSR	2.5G SFP Transceiver (Multi-mode, 850nm, DDM, -40~85 degrees C) - 300m
MGB-2GTLA20	2.5G SFP Transceiver (Single mode WDM, TX:1310nm RX:1550nm, DDM, -40~85 degrees C) - 20km
MGB-2GTLB20	2.5G SFP Transceiver (Single mode WDM, TX:1550nm RX:1310nm, DDM, -40~85 degrees C) - 20km
MGB-2GSR	2.5G SFP Transceiver (Multi-mode, 850nm, DDM, 0~70 degrees C) - 300m
MGB-2GLA20	2.5G SFP Transceiver (Single mode WDM, TX:1310nm RX:1550nm, DDM, 0~70 degrees C) - 20km
MGB-2GLB20	2.5G SFP Transceiver (Single mode WDM, TX:1550nm RX:1310nm, DDM, 0~70 degrees C) - 20km
MGB-2GLR20	2.5G SFP Transceiver (Single mode, 1310nm, DDM) - 20km
MGB-2GLR2	2.5G SFP Transceiver (Single mode, 1310nm, DDM) - 2km
MGB-2GTLR20	2.5G SFP Transceiver (Single mode, 1310nm, DDM, -40~85 degrees C) - 20km
MGB-2GTLR2	2.5G SFP Transceiver (Single mode, 1310nm, DDM, -40~85 degrees C) - 2km

Available 1Gbps SFP Modules

MGB-GT	SFP-Port 1000BASE-T Module
MGB-LX	SFP-Port 1000BASE-LX mini-GBIC module - 20km
MGB-SX	SFP-Port 1000BASE-SX mini-GBIC module - 550m
MGB-SX2	SFP-Port 1000BASE-SX mini-GBIC module - 2km
MGB-L40	SFP-Port 1000BASE-LX mini-GBIC module - 40km
MGB-L80	SFP-Port 1000BASE-LX mini-GBIC module - 80km
MGB-L120	SFP-Port 1000BASE-LX mini-GBIC module - 120km
MGB-LA10	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 10km
MGB-LB10	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 10km
MGB-LA20	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 20km
MGB-LB20	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 20km
MGB-LA40	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 40km
MGB-LB40	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 40km
MGB-LA80	SFP-Port 1000BASE-BX (WDM, TX:1490nm) mini-GBIC module - 80km
MGB-LB80	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 80km
MGB-TSX	SFP-Port 1000BASE-SX mini-GBIC module - 550m (-40~85 degrees C)
MGB-TSX2	SFP-Port 1000BASE-SX mini-GBIC module – 2km (-40~85 degrees C)
MGB-TLX	SFP-Port 1000BASE-LX mini-GBIC module - 20km (-40~85 degrees C)
MGB-TL40	SFP-Port 1000BASE-LX mini-GBIC module - 40km (-40~85 degrees C)
MGB-TL80	SFP-Port 1000BASE-LX mini-GBIC module - 80km (-40~85 degrees C)
MGB-TLA10	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 10km (-40~85 degrees C)
MGB-TLB10	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 10km (-40~85 degrees C)
MGB-TLA20	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 20km (-40~85 degrees C)
MGB-TLB20	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 20km (-40~85 degrees C)
MGB-TLA40	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 40km (-40~85 degrees C)
MGB-TLB40	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 40km (-40~85 degrees C)
MGB-TLA80	SFP-Port 1000BASE-BX (WDM, TX:1490nm) mini-GBIC module - 80km (-40~85 degrees C)
MGB-TLB80	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 80km (-40~85 degrees C)
MGB-TSA	SFP-Port 1000BASE-BX (WDM, TX:1310nm) mini-GBIC module - 2km (-40~85 degrees C)
MGB-TSB	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 2km (-40~85 degrees C)
MGB-TGT	SFP-Port 1000BASE-T Module – 100m (-40~85 degrees C)
MGB-TLA120	SFP-Port 1000BASE-BX (WDM, TX:1490nm) mini-GBIC module - 120km (-40~85 degrees C)
MGB-TLB120	SFP-Port 1000BASE-BX (WDM, TX:1550nm) mini-GBIC module - 120km (-40~85 degrees C)

Available 100Mbps SFP Modules

MFB-FX	SFP-Port 100BASE-FX Transceiver (1310nm) -2km
MFB-F20	SFP-Port 100BASE-FX Transceiver (1310nm) - 20km
MFB-FA20	SFP-Port 100BASE-BX Transceiver (WDM,TX:1310nm) -20km
MFB-FB20	SFP-Port 100BASE-BX Transceiver (WDM,TX:1550nm) -20km
MFB-F40	SFP-Port 100BASE-FX Transceiver (1310nm) - 40KM
MFB-F60	SFP-Port 100BASE-FX Transceiver (1310nm) - 60KM
MFB-TFX	SFP-Port 100BASE-FX Transceiver (1310nm) -2km (-40~85 degrees C)
MFB-TF20	SFP-Port 100BASE-FX Transceiver (1310nm) - 20km (-40~85 degrees C)
MFB-TFA20	SFP-Port 100BASE-BX (WDM, TX:1310nm) mini-GBIC module-20km (-40~85 degrees C)
MFB-TFB20	SFP-Port 100BASE-BX (WDM, TX:1550nm) mini-GBIC module-20km (-40~85 degrees C)
MFB-TFA40	SFP-Port 100BASE-BX (WDM, TX:1310nm) mini-GBIC module-40km (-40~85 degrees C)
MFB-TFB40	SFP-Port 100BASE-BX (WDM, TX:1550nm) mini-GBIC module-40km (-40~85 degrees C)
MFB-TSB	SFP-Port 100BASE-BX Transceiver (Multi-mode/WDM,TX:1550nm RX:1310nm / DDM) - 2km (-40~85 degrees C)
MFB-TF120	SFP-Port 100BASE -FX Transceiver (1550nm) - 120km (-40~85 degrees C)
MFB-TSA	SFP-Port 100BASE-BX (Multi-mode/WDM,TX:1310nm) mini-GBIC module-2km (-40~85 degrees C)
MFB-TFB60	MFB-TFB60 SFP-Port 100BASE-BX (WDM, TX:1550nm) mini-GBIC module-60km (-40~85 degrees C)
MFB-F120	SFP-Port 100BASE -FX Transceiver (1550nm) - 120km
MFB-TFA60	SFP-Port 100BASE-BX (WDM, TX:1310nm) mini-GBIC module-60km (-40~85 degrees C)