

# 100BASE-FX SFP Transceiver



The MFB 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.

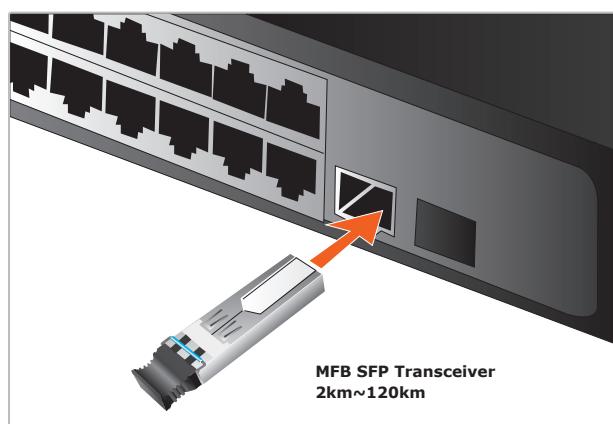
The MFB SFP transceivers using a long wavelength (1310nm) FP LD enable data transmission up to 2km on a multimode optical fiber and up to 120km on a single mode optical fiber.

To meet the increasing demand of Industrial Ethernet fiber solution, Planet has released the MFB-T 100BASE-FX transceiver series that can operate reliably in electrically harsh, climatically demanding, and wide temperature range (-40°C to 85°C) environment. The MFB-T 100BASE-FX transceiver series provides easy and fast 100BASE -FX connection for Planet wide temperature industrial equipment.

## Applications

The MFB family SFP Fast Ethernet transceivers can be installed in PLANET Switch and Media Converter products with 100BASE-FX SFP interface. The deployment distance can be extended from 2km (Multi-Mode, LC) up to 120 kilometers (Single-Mode, LC).

The MFB family SFP Fast Ethernet 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.



- SFP Multi-Source Agreement compliant
- 125Mbps IEEE 802.3u 100BASE-FX compliant
- 125Mbps FDDI ISO / IEC 9314-1 compliant
- Serial ID functionality support
- AC-coupled differential inputs and outputs
- Class 1 laser safety standard IEC 825 compliant
- 2km link on a multimode fiber and 20km to 120km on a single mode fiber
- Low power dissipation
- 0 to 60 degrees C operating temperature for MFB-FX / MFB-F20 / MFB-F40 / MFB-F60 / MFB-F120 / MFB-FA20 / MFB-FB20
- -40 to 85 degrees C operating temperature for MFB-TFX/ MFB-TF20/MFB-TF120/MFB-TSA & MFB-TSB/MFB-TFA20 & MFB-TFB20/MFB-TFA40 & MFB-TFB40/MFB-TFA60 & MFB-TFB60

The MFB-T 100BASE-FX transceiver series is an ideal solution for -40°C to 85°C wide temperature industrial equipment with 100BASE-FX SFP interfaces. The deployment distance can be extended from 2km (Multi-Mode, LC) up to 40km (Single-Mode, LC).



## Specifications

### Fast Ethernet Transceiver (100BASE-X SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (nm)	Operating Temp.
MFB-FX	100	LC	Multi Mode	2km	1310nm	0 ~ 60°C
MFB-F20	100	LC	Single Mode	20km	1310nm	0 ~ 60°C
MFB-F40	100	LC	Single Mode	40km	1310nm	0 ~ 60°C
MFB-F60	100	LC	Single Mode	60km	1310nm	0 ~ 60°C
MFB-F120	100	LC	Single Mode	120km	1550nm	0 ~ 60°C
MFB-TFX	100	LC	Multi Mode	2km	1310nm	-40 ~ 85°C
MFB-TF20	100	LC	Single Mode	20km	1310nm	-40 ~ 85°C
MFB-TF120	100	LC	Single Mode	120km	1550nm	-40 ~ 85°C

### Fast Ethernet Transceiver (100BASE-BX, Single Fiber Bi-directional SFP)

Model	Speed (Mbps)	Connector Interface	Fiber Mode	Distance	Wavelength (TX)	Wavelength (RX)	Operating Temp.
MFB-FA20 MFB-FB20	100	WDM(LC)	Single Mode	20km	1310nm	1550nm	0 ~ 60°C
					1550nm	1310nm	
MFB-TSA MFB-TSB	100	WDM(LC)	Multi-Mode	2km	1310nm	1550nm	-40 ~ 85°C
					1550nm	1310nm	
MFB-TFA20 MFB-TFB20	100	WDM(LC)	Single Mode	20km	1310nm	1550nm	-40 ~ 85°C
					1550nm	1310nm	
MFB-TFA40 MFB-TFB40	100	WDM(LC)	Single Mode	40km	1310nm	1550nm	-40 ~ 85°C
					1550nm	1310nm	
MFB-TFA60 MFB-TFB60	100	WDM(LC)	Single Mode	60km	1310nm	1550nm	-40 ~ 85°C
					1550nm	1310nm	

## Ordering Information

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

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**MFB-Series**