

# SFP Fiber Transceiver

## SFP Fiber Transceiver Series Specifications



## Specifications

### + Regulatory Compliance

Compliant with Multi-Sourcing Agreement (MSA) Small Form Factor Pluggable (SFP)  
Eye Safety: Compliant with Class 1 laser safety requirements EN 60825-1  
Environmental: RoHS compliant, lead-free  
EMC: FCC part 15, CENELEC EN 55022

### + Power Supply Voltage

Single +3.3V

### + Operating Temperature

Hardened: -40 to 85°C (-40 to 185°F)  
Non-Hardened: 0 to 70°C (32 to 158°F)

### + Warranty

Go to [www.etherwan.com/support/warranty-policy](http://www.etherwan.com/support/warranty-policy) for more details

## Fast Ethernet

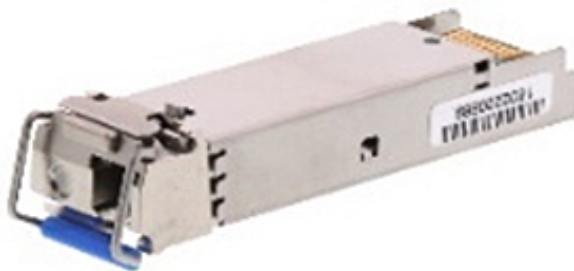
### + FAST ETHERNET (100Mbps)

Duplex LC



Part Number	Mode	Distance	Operating Temperature	Wavelength
SFPMIM02C (DDM)	Multi	2km	0 to 70°C	1310nm
EX-0155NSP-MB2L-A	Multi	2km	-40 to 85°C	1310nm
EX-0155TSP-MB5L	Single	15km	0 to 70°C	1310nm
SFPMIS20M (DDM)	Single	20km	-40 to 85°C	1310nm
EX-0155TSP-MB6L	Single	40km	0 to 70°C	1310nm
EX-0155TSP-MB6L-A	Single	40km	-40 to 85°C	1310nm

Single LC (used in pairs)



Part Number	Mode	Distance	Operating Temperature	Wavelength
EX-LM38-A3S-TC-N-B3	Multi	2km	0 to 70°C	TX: 1310nm RX: 1550nm
EX-LM48-A3S-TC-N-B5	Multi	2km	0 to 70°C	TX: 1310nm RX: 1550nm
EX-LM38-A3S-TI-N-B3	Multi	2km	-40 to 85°C	TX: 1310nm RX: 1550nm
EX-LM48-A3S-TI-N-B5	Multi	2km	-40 to 85°C	TX: 1310nm RX: 1550nm
EX-0155TBP-MB5L	Single	20km	0 to 70°C	TX: 1310nm RX: 1550nm

EX-0155TBP-LB5L	Single20km	0 to 70°C	TX: 1310nm RX: 1550nm
SFPMYS20M (DDM)	Single20km	-40 to 85°C	TX: 1310nm RX: 1550nm
SFPMZS20M (DDM)	Single20km	-40 to 85°C	TX: 1550nm RX: 1310nm
EX-0155TBP-MB6L-A	Single40km	-40 to 85°C	TX: 1310nm RX: 1550nm
EX-0155TBP-KB6L-A	Single40km	-40 to 85°C	TX: 1310nm RX: 1550nm

## RJ45



Part Number	Cable Type	Distance	Operating Temperature
SFPMXT1AC	Cat 5 or better	100m	0 to 70°C

EtherWAN's SFP modules are rigorously tested, 100% and are interoperable with all MSA compliant networking devices. EtherWAN offers a variety of options for both commercial and hardened environments, which provides flexible connectivity solutions.

For detailed SFP specifications, please download the [datasheet](#).

# Gigabit Ethernet

## + GIGABIT ETHERNET (1000Mbps)

Duplex LC



Part Number	Mode	Distance	Operating Temperature	Wavelength	DDM
SFPGIM5AC	Multi	275m/550m	0 to 70°C	850nm	✓
SFPGIM5AM	Multi	275m/550m	-40 to 85°C	850nm	✓
SFPGIM02C	Multi	2km	0 to 70°C	1310nm	✓
SFPGIM02M	Multi	2km	-40 to 85°C	1310nm	✓
SFPGIS10C	Single	10km	0 to 70°C	1310nm	✓
SFPGIS10M	Single	10km	-40 to 85°C	1310nm	✓
EX-1250TSP-MB5LS	Single	20km	0 to 70°C	1310nm	-
SFPGIS20M	Single	20km	-40 to 85°C	1310nm	✓
EX-LS38-C3L-TC-N-EB	Single	40km	0 to 70°C	1310nm	✓
EX-LS38-C3L-TI-N-EB	Single	40km	-40 to 85°C	1310nm	✓
EX-LS48-C3U-TC-N-EB	Single	70km	0 to 70°C	1550nm	✓
EX-LS48-C3U-TI-N-EB	Single	70km	-40 to 85°C	1310nm	✓
SFPGIS90C	Single	90km	0 to 70°C	1550nm	✓

Single LC (used in pairs)



Part Number	Mode	Distance	Operating Temperature	Wavelength	DDM
EX-1250TBP-MB1LS	Multi	550m	0 to 70°C	TX: 1310nm/ RX: 1550nm	-

EX-1250TBP-LB1LS	Multi 550m	0 to 70°C	TX: 1550nm/ RX: 1310nm	-
EX-1250TBP-MB1L-AS	Multi 550m	-40 to 85°C	TX: 1310nm/ RX: 1550nm	-
EX-1250TBP-LB1L-AS	Multi 550m	-40 to 85°C	TX: 1550nm/ RX: 1310nm	-
EX-LM38-C3S-TI-N-CE	Multi 550m	-40 to 85°C	TX: 1310nm/ RX: 1550nm	✓
EX-LM48-C3S-TI-N-CE	Multi 550m	-40 to 85°C	TX: 1550nm/ RX: 1310nm	✓
EX-1250TBP-MB4LS	Single10km	0 to 70°C	TX: 1310nm/ RX: 1550nm	-
EX-1250TBP-KB4LS	Single10km	0 to 70°C	TX: 1310nm/ RX: 1550nm	-
EX-1250TBP-MB4L-AS	Single10km	-40 to 85°C	TX: 1310nm/ RX: 1550nm	-
EX-1250TBP-KB4L-AS	Single10km	-40 to 85°C	TX: 1550nm/ RX: 1310nm	-
EX-1250TBP-MB5LS	Single20km	0 to 70°C	TX: 1310nm/ RX: 1550nm	-
EX-1250TBP-KB5LS	Single20km	0 to 70°C	TX: 1310nm/ RX: 1550nm	-
EX-1250TBP-MB5L-AS	Single20km	-40 to 85°C	TX: 1310nm/ RX: 1550nm	-
EX-1250TBP-KB5L-AS	Single20km	-40 to 85°C	TX: 1550nm/ RX: 1310nm	-
SFPGYS20M	Single20km	-40 to 85°C	TX: 1310nm/ RX: 1550nm	✓
SFPGZS20M	Single20km	-40 to 85°C	TX: 1550nm/ RX: 1310nm	✓
EX-LS38-C3L-TC-N-CE	Single40km	0 to 70°C	TX: 1550nm/ RX: 1310nm	✓
EX-LS48-C3L-TC-N-CE	Single40km	0 to 70°C	TX: 1310nm/ RX: 1550nm	✓
EX-LS38-C3L-TI-N-CE	Single40km	-40 to 85°C	TX: 1550nm/ RX: 1310nm	✓
EX-LS48-C3L-TI-N-CE	Single40km	-40 to 85°C	TX: 1310nm/ RX: 1550nm	✓
EX-LS38-C3U-TC-N-CE	Single60km	0 to 70°C	TX: 1310nm/ RX: 1550nm	✓
EX-LS48-C3U-TC-N-CE	Single60km	0 to 70°C	TX: 1310nm/ RX: 1550nm	✓
EX-LS38-C3U-TI-N-CE	Single60km	-40 to 85°C	TX: 1310nm/ RX: 1550nm	✓
EX-LS48-C3U-TI-N-CE	Single60km	-40 to 85°C	TX: 1310nm/ RX: 1550nm	✓
EX-LS48-C3U-TC-N51-CE	Single80km	0 to 70°C	TX: 1310nm/ RX: 1550nm	✓
EX-LS48-C3U-TC-N57-CE	Single80km	0 to 70°C	TX: 1310nm/ RX: 1550nm	✓

## RJ45



Part Number	Cable Type	Distance	Operating Temperature
SFPGXT1AM	Cat 5 or better	100m	-40 to 85°C

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For detailed SFP specifications, please download the [datasheet](#).

## 2.5 Gigabit Ethernet

### + 2.5G BASE SFP Series\*

Hardened (Operating Temperature: -40 to 85°C/-40 to 185°F)



Duplex LC	Distance	Cable Type	Wavelength	Link Budget*	Optical Output Power	Sensitivity
SFP21M2AM (DDM)	160m 400m 500m	OM2 (50/125µm, MM) OM3 (50/125µm, MM) OM4 (50/125µm, MM)	850nm	850nm	-7.5 to -1dBm	-13.5dBm
SFP21S20M (DDM)	20Km	9/125µm, SM	1310nm	1310nm	-5 to 0dBm	-16dBm



RJ45	Distance	Cable Type	Wavelength	Link Budget*	Optical Output Power	Sensitivity
SFP2XT1AM	100m	Cat. 5A or better	N/A	-	-	-

\* More SFP options upon the request.

\*\* Link Budget data is based on pair of the same SFP modules.

## 10GBASE SFP Series\*

+ Non-Hardened (Operating Temperature: 0 to 70°C/32 to 158°F)



Duplex LC	Distance	Cable Type	Wavelength	Link Budget**	Optical Output Power	Sensitivity
SFPTIM3AE (DDM)	300m	62.5/125µm/50/125µm, MM	850nm	2.8dBm	-7.1 to -1dBm	-9.9dBm
SFPTIS10E (DDM)	10Km	9/125µm, SM	1310nm	8.4dBm	-6 to +0.5dBm	-14.4dBm
SFPTIS20C (DDM)	20Km	9/125µm, SM	1310nm	9.4dBm	-5 to +1dBm	-14.4dBm
SFPTIS40C (DDM)	40Km	9/125µm, SM	1310nm	15dBm	-0.5 to +5dBm	-15.5dBm

+ Hardened (Operating Temperature: -40 to 85°C/-40 to 185°F)



Duplex LC	Distance	Cable Type	Wavelength	Link Budget**	Optical Output Power	Sensitivity
SFPTIM3AM (DDM)	300m	62.5/125µm/50/125µm, MM	850nm	2.8dBm	-7.1 to -1dBm	-9.9dBm
SFPTIS10M (DDM)	10Km	9/125µm, SM	1310nm	6.4dBm	-8 to +0.5dBm	-14.4dBm
SFPTIS20M (DDM)	20Km	9/125µm, SM	1310nm	9.4dBm	-5 to +1dBm	-14.4dBm
SFPTIS40M (DDM)	40Km	9/125µm, SM	1310nm	15dBm	0.5 to +5dBm	-15.5dBm





Hardened (Operating Temperature: -40 to 85°C/-40 to 185°F)



RJ-45	Distance	Cable Type	Wavelength	Link Budget**	Optical Output Power	Sensitivity
SFPTXT1AM	100m	Cat.6a or above	-	-	-	-

\* More SFP options upon the request.

\*\* Link Budget data is based on pair of the same SFP modules.

