

SFP-1G Series

1G-port Gigabit Ethernet SFP modules



- > Compliant with IEEE 802.3z
- > Differential LVPECL inputs and outputs
- > Single power supply 3.3V
- > TTL signal detect indicator
- > Hot Pluggable
- > Class 1 laser product, complies with EN60825-1



Specifications

Interface

Gigabit Port: 1 port

Connector: Duplex LC Connector or

Simplex LC Connector* (WDM-type only)

* WDM-type SFP modules must be used in pairs (e.g., SFP-1GXALC and SFP-1GXXBLC)

Optical Fiber

	Gigabit Ethernet			
	SFP-SX	SFP-LX	SFP-LHX	SFP-ZX
Wavelength	850 nm	1310 nm	1310 nm	1550 nm
Max. TX	-4 dBm	-3 dBm	1 dBm	5 dBm
Min. TX	-9.5 dBm	-9.5 dBm	-4 dBm	0 dBm
RX Sensitivity	-18 dBm	-20 dBm	-24 dBm	24 dBm
Link Budget	8.5 dB	10.5 dB	20 dB	24 dB
Typical Distance	550 m ^a 275 m ^b	1100 m ^c 550 m ^d 10 km ^e	40 km ^e	80 km ^f
Saturation	0 dBm	-3 dBm	-3 dBm	-3 dBm

	Gigabit Ethernet					
	SFP-10A	SFP-10B	SFP-20A	SFP-20B	SFP-40A	SFP-40B
Wave-length	TX 1310 nm, RX 1550 nm		TX 1310 nm, RX 1550 nm		TX 1310 nm, RX 1550 nm	
Max. TX	-3 dBm		-2 dBm		2 dBm	
Min. TX	-9 dBm		-8 dBm		-3 dBm	
RX Sensitivity	-21 dBm		-23 dBm		-23 dBm	
Link Budget	12 dB		15 dB		20 dB	
Typical Distance	10 km ^{ef}		20 km ^{ef}		40 km ^{ef}	
Saturation	-1 dBm		-1 dBm		-1 dBm	

- a. 50/125 μm, 400 MHz*km fiber optic cable
- b. 62.5/125 μm, 200 MHz*km fiber optic cable
- c. 50/125 μm, 800 MHz*km fiber optic cable
- d. 62.5/125 μm, 500 MHz*km fiber optic cable
- e. 9/125 μm, 3.5 PS/(nm*km) fiber optic cable
- f. 9/125 μm, 19 PS/(nm*km) fiber optic cable

Environmental Limits

Operating Temperature: 0 to 60°C (32 to 140°F)

-40 to 85°C (-40 to 185°F) for T models

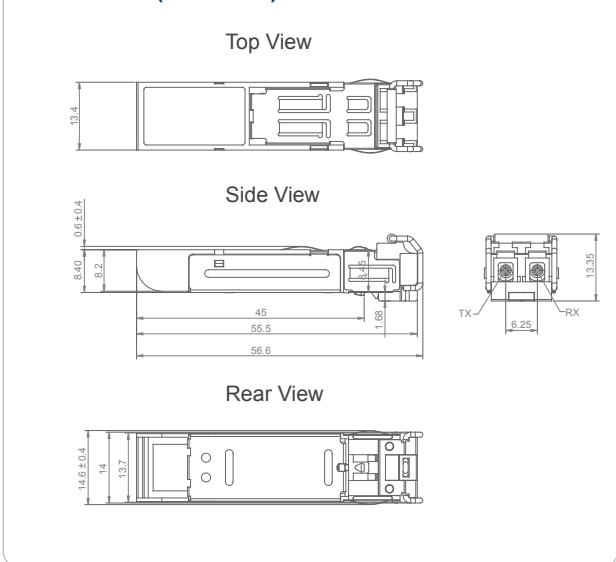
Storage Temperature: -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Regulatory Approvals

Safety: UL, TÜV, EN60825-1

Dimensions (unit = mm)



Ordering Information

SFP Modules

Product Model		Port Interface			
Standard Temperature (0 to 60°C)	Extended Temperature (-40 to 85°C)	1000BaseSX, LC Connector, 0.5 km	1000BaseLX, LC Connector, 10 km	1000BaseLHX, LC Connector, 40 km	1000BaseZX, LC Connector, 80 km
SFP-1GSXLC	SFP-1GSXLC-T*	1			
SFP-1GLXLC	SFP-1GLXLC-T		1		
SFP-1GLHXL	SFP-1GLHXL-T			1	
SFP-1GZXL	SFP-1GZXL-T				1

* SFP-1GSXLC-T: -20 to 75°C operating temperature

WDM-type (BiDi) SFP Modules

Product Model		Port Interface					
Standard Temperature (0 to 60°C)	Extended Temperature (-40 to 85°C)	1000BaseSFP, LC Connector, 10 km		1000BaseSFP, LC Connector, 20 km		1000BaseSFP, LC Connector, 40 km	
		TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm
SFP-1G10ALC	SFP-1G10ALC-T	1					
SFP-1G10BLC	SFP-1G10BLC-T		1				
SFP-1G20ALC	SFP-1G20ALC-T			1			
SFP-1G20BLC	SFP-1G20BLC-T				1		
SFP-1G40ALC	SFP-1G40ALC-T					1	
SFP-1G40BLC	SFP-1G40BLC-T						1

Matched Products

- **EDS-828/728 series:** IM-2GSFP series Gigabit Ethernet interface module
- **EDS-G509 series:** 9G-port full Gigabit managed Ethernet switches
- **EDS-518A series:** 16+2G-port Gigabit managed Ethernet switches
- **EDS-510A series:** 7+3G-port Gigabit managed Ethernet switches
- **PX-1510 series:** 7+3G-port Gigabit PoE managed Ethernet switches
- **PT and IKS series:** PM-7200-2G/4G series Gigabit Ethernet interface modules
- **EDS-G308 series:** 8G-port full Gigabit unmanaged Ethernet switches
- **IMC-101G series:** Industrial Gigabit media converters