

# SFP-1G Series

## 1G-port Gigabit Ethernet SFP modules



- > Compliant with IEEE 802.3z
- > Differential LVPECL inputs and outputs
- > TTL signal detect indicator
- > Hot pluggable LC duplex connector
- > Class 1 laser product, complies with EN60825-1



### Specifications

#### Interface

Ethernet Ports: 1

Connectors: Duplex LC Connector or Simplex LC Connector (WDM-type only)

Note: WDM-type SFP modules must be used in pairs (e.g., SFP-1GXXALC and SFP-1GXXBLC)

#### Optical Fiber

	Gigabit Ethernet												
	SFP-SX	SFP-LSX	SFP-LX	SFP-LH	SFP-LHX	SFP-ZX	SFP-EZX	SFP-10A	SFP-10B	SFP-20A	SFP-20B	SFP-40A	SFP-40B
Wave-length	850 nm	1310 nm	1310 nm	1310 nm	1310 nm	1550 nm	1550 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	TX 1310 nm, RX 1550 nm	TX 1550 nm, RX 1310 nm
Max. TX	-4 dBm	-1 dBm	-3 dBm	-2 dBm	1 dBm	5 dBm	5 dBm	-3 dBm	-2 dBm	-2 dBm	-2 dBm	2 dBm	2 dBm
Min. TX	-9.5 dBm	-9 dBm	-9.5 dBm	-8 dBm	-4 dBm	0 dBm	0 dBm	-9 dBm	-8 dBm	-8 dBm	-8 dBm	-3 dBm	-3 dBm
RX Sensitivity	-18 dBm	-19 dBm	-20 dBm	-23 dBm	-24 dBm	-24 dBm	-30 dBm	-21 dBm	-21 dBm	-23 dBm	-23 dBm	-23 dBm	-23 dBm
Link Budget	8.5 dB	10 dB	10.5 dB	15 dB	20 dB	24 dB	30 dB	12 dB	12 dB	15 dB	15 dB	20 dB	20 dB
Typical Distance	550 m <sup>a</sup>	2 km <sup>b</sup>	10 km <sup>c</sup>	30 km <sup>c</sup>	40 km <sup>c</sup>	80 km <sup>c</sup>	110 km <sup>c</sup>	10 km <sup>c</sup>	10 km <sup>c</sup>	20 km <sup>c</sup>	20 km <sup>c</sup>	40 km <sup>c</sup>	40 km <sup>c</sup>
Saturation	0 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm	-3 dBm	-1 dBm	-1 dBm	-1 dBm	-1 dBm	-1 dBm	-1 dBm

a. 50/125 μm, 400 MHz \* km or 62.5/125 μm, 500 MHz \* km @ 850 nm multi-mode fiber optic cable

b. 62.5/125 μm, 750 MHz \* km @ 1310 nm multi-mode fiber optic cable

c. 9/125 μm single-mode fiber optic cable

Note: The actual communication distance depends on many factors, including connector loss, cable deployment, and the age of the cabling system. We recommend doing a link budget analysis and reserving a 3 dB margin for such factors.

#### Environmental Limits

##### Operating Temperature:

Standard Models: 0 to 60°C (32 to 140°F)

Wide Operating Temp. Models: -40 to 85°C (-40 to 185°F)

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

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

#### Regulatory Approvals

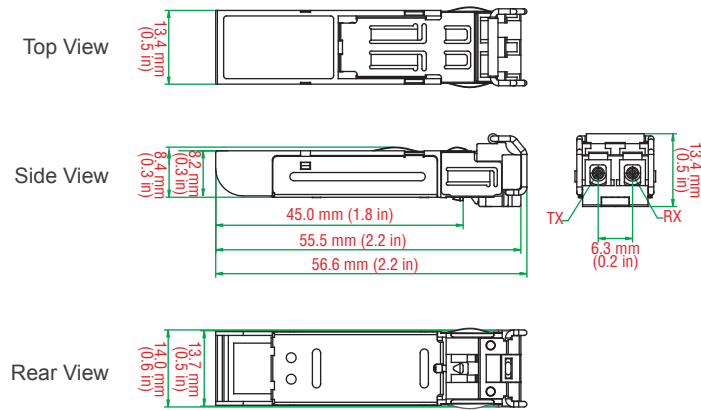
Safety: UL, TÜV

#### Warranty

Warranty Period: 3 years

Details: See [www.moxa.com/warranty](http://www.moxa.com/warranty)

## Dimensions



## : Ordering Information

### SFP Modules

Available Models		Port Interface						
Standard Temperature (0 to 60°C)	Wide Temperature (-40 to 85°C)	1000BaseSX, LC Connector, 0.5 km	1000BaseLSX, LC Connector, 2 km	1000BaseLX, LC Connector, 10 km	1000BaseLH, LC Connector, 30 km	1000BaseLHX, LC Connector, 40 km	1000BaseZX, LC Connector, 80 km	1000BaseZX, LC Connector, 110 km
SFP-1GSXLC	SFP-1GSXLC-T*	1	-	-	-	-	-	-
SFP-1GLSXLC	SFP-1GLSXLC-T	-	1	-	-	-	-	-
SFP-1GLXLC	SFP-1GLXLC-T	-	-	1	-	-	-	-
SFP-1GLHLC	SFP-1GLHLC-T	-	-	-	1	-	-	-
SFP-1GLHXL	SFP-1GLHXL-T	-	-	-	-	1	-	-
SFP-1GZXLC	SFP-1GZXLC-T	-	-	-	-	-	1	-
SFP-1GEZXL	-	-	-	-	-	-	-	1

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

### WDM-type (BiDi) SFP Modules

Available Models		Port Interface					
Standard Temperature (0 to 60°C)	Wide 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

### The SFP-1G series modules can be used with the following products

- EDS-728/828 series:** IM-2GSFP series Gigabit Ethernet interface modules
- EDS-611/619 series:** 8+3G/16+3G-port compact modular managed Ethernet switches
- 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
- EDS-P510 series:** 7+3G-port Gigabit PoE managed Ethernet switches
- IKS-6526-2GTXSFP series:** 24+2G-port rackmount 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
- EDR-G903 series:** Industrial Gigabit Firewall/VPN secure router
- IMC-101G series:** Industrial Gigabit media converters