



M-SFP-LX/LC EEC

Industrial Networking:Industrial Ethernet:MACH 4000:SFP Gigabit-ETHERNET
Transceiver for media module

Product description	
Description	SFP Fiberoptic Gigabit Ethernet Transceiver, extended temperature range
Port type and quantity	1 x 1000BASE-LX with LC connector
Type	M-SFP-LX/LC EEC
Order No.	943 897-001
Network size - length of cable	
Multimode fiber (MM) 50/125 µm	0 - 550 m, 0 - 11 dB link budget at 1310 nm A = 1 dB/km, 3 dB reserve, B = 800 MHz x km With f/o adapter in line with IEEE 802.3-2000 clause 38 (single-mode fiber offset-launch mode conditioning patch cord)
Multimode fiber (MM) 62.5/125 µm	0 - 550 m, 0 - 11 dB link budget at 1310 nm A = 1 dB/km, 3 dB reserve, B = 500 MHz x km With f/o adapter in line with IEEE 802.3-2000 clause 38 (single-mode fiber offset-launch mode conditioning patch cord)
Single mode fiber (SM)9/125 µm	0 m - 20 km, 0 - 11 dB link budget at 1310 nm A = 0.4 dB/km, 3 dB reserve, D = 3.5 ps/(nm x km)
Power requirements	
Operating voltage	power supply via the switch
Power consumption	1 W
Service	
Diagnostics	optical input and output power, transceiver temperature
Ambient conditions	
Operating temperature	-40 °C to +85 °C
Storage/transport temperature	-40°C to +85°C
Relative humidity (non-condensing)	10% to 95%
Mechanical construction	
Dimensions (W x H x D)	20 mm x 18 mm x 50 mm
Mounting	SFP slot
Weight	40 g
Protection class	IP 20
Mechanical stability	
IEC 60068-2-27 shock	15 g, 11 ms duration, 18 shocks
IEC 60068-2-6 vibration	1 mm, 2 Hz - 13.2 Hz, 90 min.; 0.7g, 13.2 Hz - 100 Hz, 90 min.; 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.
EMC interference immunity	
EN 61000-4-2 electrostatic discharge (ESD)	6 kV contact discharge, 8 kV air discharge
EN 61000-4-3 electromagnetic field	10 V/m (80 - 1000 MHz)
EN 61000-4-4 fast transients (burst)	2 kV power line, 1 kV data line
EN 61000-4-5 surge voltage	power line: 2 kV (line/earth), 1 kV (line/line), 1kV data line
EN 61000-4-6 conducted immunity	3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz)
EMC emitted immunity	
FCC CFR47 Part 15	FCC CFR47 Part 15 Class A
EN 55022	EN 55022 Class A
Approvals	

Safety of industrial control equipment	cUL 508 (E175531)
Hazardous locations	cUL 1604 Class 1 Div 2 (E203960)
Germanischer Lloyd	Germanischer Lloyd (43 109-02 HH)
Scope of delivery and accessories	
Scope of delivery	SFP module