

EF24L Series

Industrial Gigabit Ethernet to Fiber Media Converter



FEATURE HIGHLIGHTS

- Supports auto MDI/MDI-X and auto negotiation
- Available in both SC and SFP Fiber Connectors
- Redundant Power Input
- Jumbo packets up to 10K bytes
- Link Fault Pass-Through (LFP)
- Operating Temperature : -10°C to +70°C,
-40°C to +70°C for -T models

PRODUCT DESCRIPTION

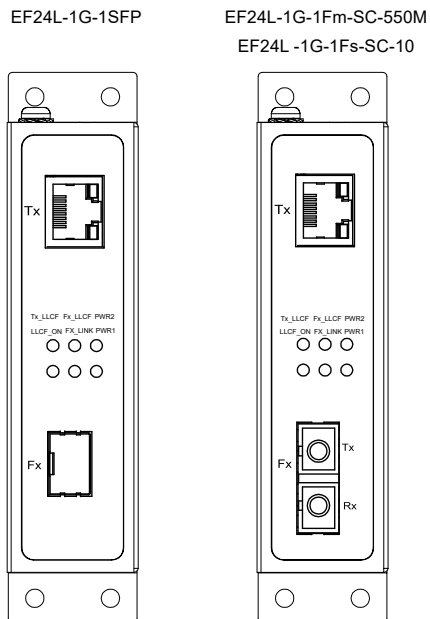
The EF24L Series is a lite Industrial Gigabit Ethernet to Fiber Converter providing media conversion between 10/100/1000 BASE-T(X) and 100/1000 BASE-(F)X (available in both SC and SFP fiber connectors). Whether you're upgrading your system or simply replacing an obsolete device with a newer model, EF24L ensures that the process is both easy and cost-efficient.

On top of basic media conversion, the EF24L Series comes with a DIP switch to configure or enable more advanced functions including fiber speed, fiber auto negotiation, link fail pass-through, and jumbo frame limitation to allow maximal flexibility. Although small and slim, it is no doubt rugged and ready for any application.

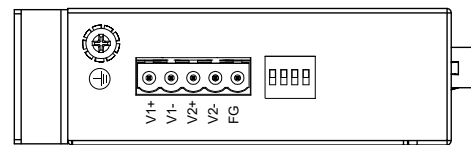
The EF24L Series Media Converter also provides auto MDI/MDI-X, Auto Negotiation, and Link Fault Pass-Through (LFP) function and one 5 pin DIP switch to configure the functions, such as the TX_Duplex mode, FX_Duplex mode, Speed mode, LFP, Auto Negotiation.

DIMENSIONS & LAYOUT

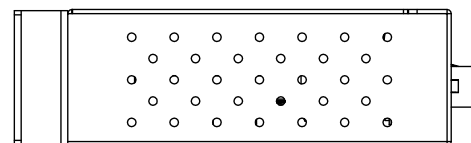
Front View



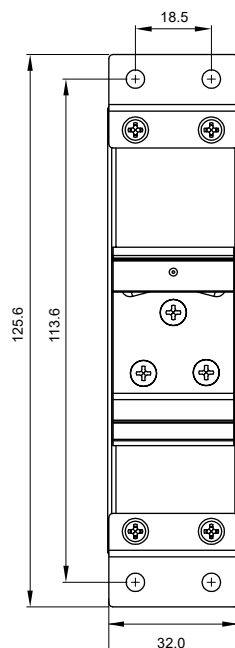
Top View



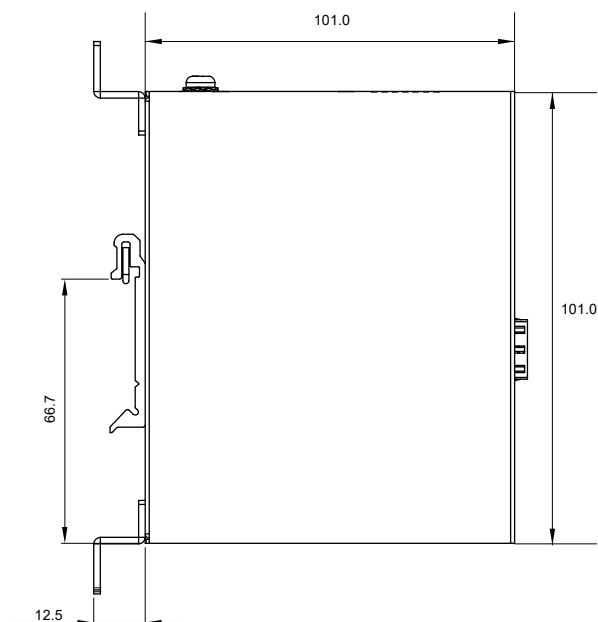
Bottom View



Rear View



Side View



SPECIFICATIONS

Technical Specifications		
Model Name	EF24L	
Technology		
Standards	IEEE 802.3 for 10BASE T IEEE 802.3u for 100BASE-T(X) and 100BASE-FX IEEE 802.3ab for 1000BASE-T(X) IEEE 802.3z for 1000BASE-X	
Interface		
RJ45 Ports	10/100/1000Base-T(X) Full-Duplex / Half-Duplex auto negotiation	
Fiber Ports	100/1000BASE-(F)X or SFP Slot	
LED Indicators	PWR1, PWR2, F_Mode, Fx_Link, LLCF_ON, Tx_LLCF, Fx_LLCF	
DIP Switch	Speed mode, Link Transparency, Fiber Auto Negotiation, Jumbo Frame	
Power Management		
Input Voltage	9-48 VDC	
Input Current	0.3A max, 9 VDC	
Connector	Removable 5-pin Terminal Block	
Reverse Polarity Protection	Present	
Physical Characteristics		
Housing	Metal, IP30 protection	
Dimensions(W x H x D mm)	32 x 101 x 101 (1.26 x 3.98 x 3.98 in)	
Weight	EF24L-1G-1Fm-SC-550M / EF24L-1G-1Fs-SC-10 : 320g EF24L-1G-1SFP : 330g	
Installation	DIN-Rail, Wall-Mount (optional kit)	
Environmental Limits		
Operating Temperature	-10°C to +70°C (14°F to +158°F) -40°C to +70°C (-40°F to +158°F) for -T models	
Storage Temperature	-40°C to +85°C (-40°F to +185°F)	
Ambient Relative Humidity	5 to 95%, 55°C (non-condensing)	
Optical Fiber Specifications		
Mode	Multi-mode	Single-mode
Distance	550M	10KM
Bit Rate	1250Mbps	1250Mbps
Wavelength (nm)	1310	1310
Application	1000Base-SX	1000Base-LX
Tx Power (dBm)	-9.5 to -4	-9.5 to -3
Rx Sensitivity (dBm)	< -18	< -20
Remark	EF24L-1G-1Fm-SC-550M	EF24L-1G-1Fs-SC-10

REGULATORY APPROVALS

Regulatory Approvals				
Safety	EN62368-1			
EMC	FCC Part 15, Subpart B, Class A EN55032 EN61000-6-4 EN 61000-3-2 EN 61000-3-3 EN 55035 EN 61000-6-2			
Test Item	Item		Value	Level
IEC 61000-4-2	ESD	Contact Discharge	±6KV	3
		Air Discharge	±8KV	3
IEC 61000-4-3	RS	80-1000MHz	10 V/m	3
IEC 61000-4-4	EFT	DC Power Port	±2.0KV	3
		Signal Port	±1.0KV	3
IEC 61000-4-5	Surge	DC Power Port	Line-to Line±1.0KV	3
		Signal Port	Line-to Earth±1.0KV	2
		DC Power Port	Line-to Earth±1.0KV	2
IEC 61000-4-6	CS	Conducted(Enclosure)	10 Vrms	3
IEC 61000-4-8	PFMF	(Enclosure)	50/60 Hz 30 A/m	4
IEC 61000-4-11	DIP	AC Power Port	-	-
Shock	MIL-STD-810G Method 516.7			
Drop	MIL-STD-810G Method 516.7			
Vibration	MIL-STD-810G Method 514.7			
RoHS	Yes			
MTBF	415,681.88 hrs / 47.45 years (25°C)			
Warranty	5 years			

ORDERING INFORMATION

Ordering information		
Model name	Part Number	Description
EF24L-1G-1Fm-SC-550M	1P1EF24L000001G	Industrial Gigabit Ethernet-to-Fiber Media Converter, multimode, SC connector, Link Fault Pass-Through, Auto Speed, 550 M
EF24L-1G-1Fs-SC-10	1P1EF24L000002G	Industrial Gigabit Ethernet-to-Fiber Media Converter, single-mode, SC connector, Link Fault Pass-Through, Auto Speed, 10 KM
EF24L-1G-1SFP (EOL, use EF24S-1G-1SFP)	1P1EF24L000003G	Industrial Gigabit Fast Ethernet-to-Fiber Media Converter, Link Fault Pass-Through, Auto Speed, SFP
EF24L-1G-1Fm-SC-550M-T	1P1EF24LT00001G	Industrial Gigabit Ethernet-to-Fiber Media Converter, multimode, SC connector, Link Fault Pass-Through, Auto Speed, 550 M, wide temperature range
EF24L-1G-1Fs-SC-10-T	1P1EF24LT00002G	Industrial Gigabit Ethernet-to-Fiber Media Converter, single-mode, SC connector, Link Fault Pass-Through, Auto Speed, 10 KM, wide temperature range
EF24L-1G-1SFP-T (EOL, use EF24S-1G-1SFP)	1P1EF24LT00003G	Industrial Gigabit Fast Ethernet-to-Fiber Media Converter, Link Fault Pass-Through, Auto Speed, SFP, wide temperature range

Optional Accessories		
Model name	Part Number	Description
WMK-450-Black	70100000000052G	Metal Wall Mount Kit, Black
AD1120-48F	50501201480001G	120W/2.5A DIN-Rail 48 VDC power supply with universal 100~240VAC/120-370VDC input
AD1240-48C	50502401550001G	240W/5A DIN-Rail 48 VDC power supply with universal 100 to 240VAC/120-370VDC input
AXFD-1314-0523	522AXFD1314001G	SFP Transceiver, 155Mbps, Multi-mode, 1310nm, 2km, -40°C to +85°C, DDMI
AXFD-1314-0553	522AXFD1314011G	SFP Transceiver, 155Mbps, Single-mode, 1310nm, 30km, -40°C to +85°C, DDMI
AXGD-5854-0513	522AXGD5854001G	SFP Transceiver, 1250Mbps, 850nm, Multi-mode, 550m, 3.3V, -40°C to +85°C, DDMI
AXGD-1354-0523	522AXGD1354001G	SFP Transceiver, 1250Mbps, 1310nm, Multi-mode, 2km, 3.3V, -40°C to +85°C, DDM
AXGD-1354-0533	522AXGD1354011G	SFP Transceiver, 1250Mbps, 1310nm, Single-mode, 10km, 3.3V, -40°C to +85°C, DDMI
AXGD-3354-0593	522AXGD3354001G	SFP Transceiver, 1250Mbps, 1310nm, Single-mode, 40km, 3.3V, -40°C to +85°C, DDMI
AXXE-5886-05B3	522AXXE5886001G	SFP Transceiver, 10Gbps Multi, 850nm, 300m, -40°C to +85°C