

EF24L Series

Industrial Gigabit Ethernet to Fiber Media Converter



FEATURE HIGHLIGHTS

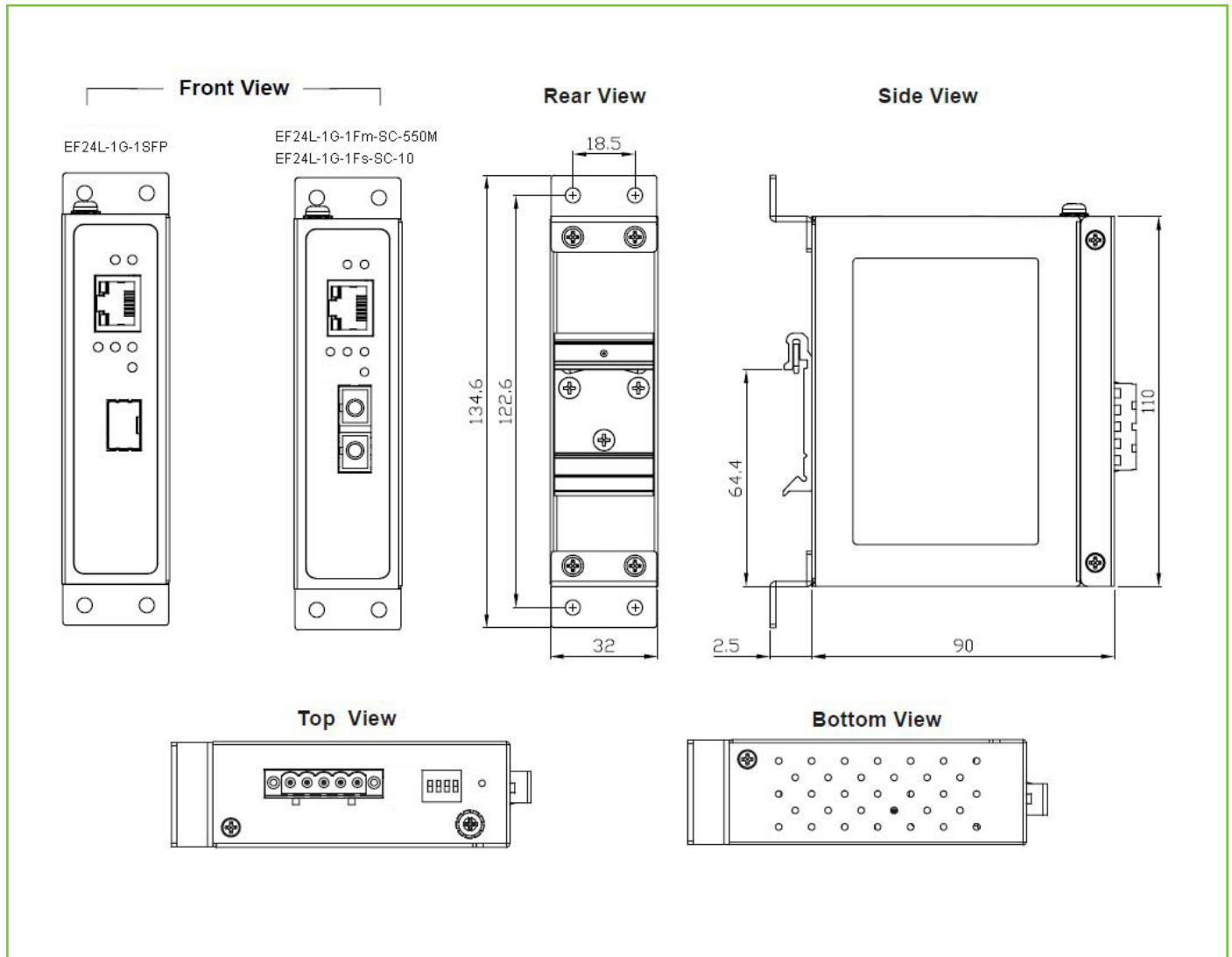
- Available in both SC and SFP Fiber Connectors
- Redundant Power Input
- Jumbo packets up to 10K bytes
- Link Fault Pass-Through (LFP)
- Operating Temperature : -10°C to +70°C

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.

DIMENSIONS & LAYOUT



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) auto negotiation speed	
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	TBD	
Connector	Removable 5-pin Terminal Block	
Reverse Polarity Protection	Present	
Physical Characteristics		
Housing	Metal, IP30 protection	
Dimensions(W x H x D)	32mm x 90mm x 110mm (1.26 x 3.54 x 4.33 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)	
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	CB (IEC62368-1/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
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-810F Method 516.5			
Drop	MIL-STD-810F Method 516.5			
Vibration	MIL-STD-810F Method 514.5 C-1 & C-2			
RoHS	Yes			
MTBF	415,681.88 hrs / 47.45 years (25°C)			
Warranty	5 years			

ORDERING INFORMATION

Ordering information

Model name	Part Number	Enclosure
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	1P1EF24L000003G	Industrial Gigabit Fast Ethernet-to-Fiber Media Converter, Link Fault Pass-Through, Auto Speed, SFP

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