

## Industrial Gigabit Ethernet to Fiber Media Converter

### EF24 Series



#### Feature Highlights

- Cut-Through Forwarding Mode
- Available in both SC and SFP Fiber Connectors
- Redundant Power Input
- Jumbo packets up to 9K bytes
- Link Fault Pass-Through (LFP) and Link Loss Carry Forward
- Operating Temperature : -10°C ~ 70°C

#### Product Description

EF24 Series Industrial Gigabit Ethernet to Fiber Converter provide media conversion between 10/100/1000 BASE-T(X) and 100/1000 BASE-F(X) (available in both SC and SFP fiber connectors).

EF24 Series comes with a DIP switch to configure or enable the more advanced functions including the fiber speed, fiber auto negotiation, link fail pass-through, terminal/center device, power saving, jumbo frame, and cut-through forwarding to reach the maximum flexibility.

## Specification

### 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
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### Interface

RJ45 Ports	10/100/1000Base-T(X) auto negotiation speed
Fiber Ports	100/1000BASE-(F)X or SFP Slot
LED Indicators	PWR1, PWR2, CT-TML, F_Mode, Fx_Link, LLCF_ON, Test, Tx_LLCF, Fx_LLCF
DIP Switch	Media Converter mode, Speed mode, Link Transparency, TS-1000 Terminal / Center mode, Power Save, Fiber Auto Negotiation, Jumbo Frame, Cut-through

### Power Management

Input Voltage	9-48 VDC
Input Current	Max. 0.3A @ 9VDC
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	EF24-1G-1Fm-SC-550M / EF24-1G-1Fs-SC-10 : 320g EF24-1G-1SFP : 330g
Installation	DIN-Rail, Wall-Mount (optional kit)

### Environmental Limits

Operating Temperature	-10°C ~ 70°C (14°F ~ 158°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Ambient Relative Humidity	5 ~ 95%, 55°C (non-condensing)

### Optical Fiber Specifications

Mode	Multi-mode	Single-mode
Distance	550M	10KM
Bit Rate	1250Mbps	1250Mbps
Wavelength (nm)	850	1310
Application	1000Base-SX	1000Base-LX
Tx Power (dBm)	-9.5~-4	-9.5~-3
Rx Sensitivity (dBm)	< -18	< -20
Remark	EF24-1G-1Fm-SC-550M	EF24-1G-1Fs-SC-10

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## Regulatory Approvals

Safety	CB			
EMC	FCC Part 15, Subpart B, Class A EN55032 EN 61000-3-2 EN 61000-3-3 EN 55024			
Test	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	AC Power Port	±2.0KV	3
		DC Power Port	±2.0KV	3
		Signal Port	±1.0KV	3
IEC 61000-4-5	Surge	AC Power Port	Line-to Line±1.0KV	3
		AC Power Port	Line-to Earth±2.0KV	3
		DC Power Port	Line-to Line±1.0KV	3
		Signal Port	Line-to Earth±1.0KV	3
IEC 61000-4-6	CS	Conducted(Enclosure)	3 Vrms	2
IEC 61000-4-8	PFMF	(Enclosure)	AC 50/60 Hz 10 A/m	3
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

EF24-1G-1Fm-SC-550M	Industrial Gigabit Ethernet-to-Fiber Media Converter, multimode, SC connector, Link Fault Pass-Through, Auto Speed, 550 M
EF24-1G-1Fs-SC-10	Industrial Gigabit Ethernet-to-Fiber Media Converter, single-mode, SC connector, Link Fault Pass-Through, Auto Speed, 10 KM
EF24-1G-1SFP	Industrial Gigabit Fast Ethernet-to-Fiber Media Converter, Link Fault Pass-Through, Auto Speed, SFP

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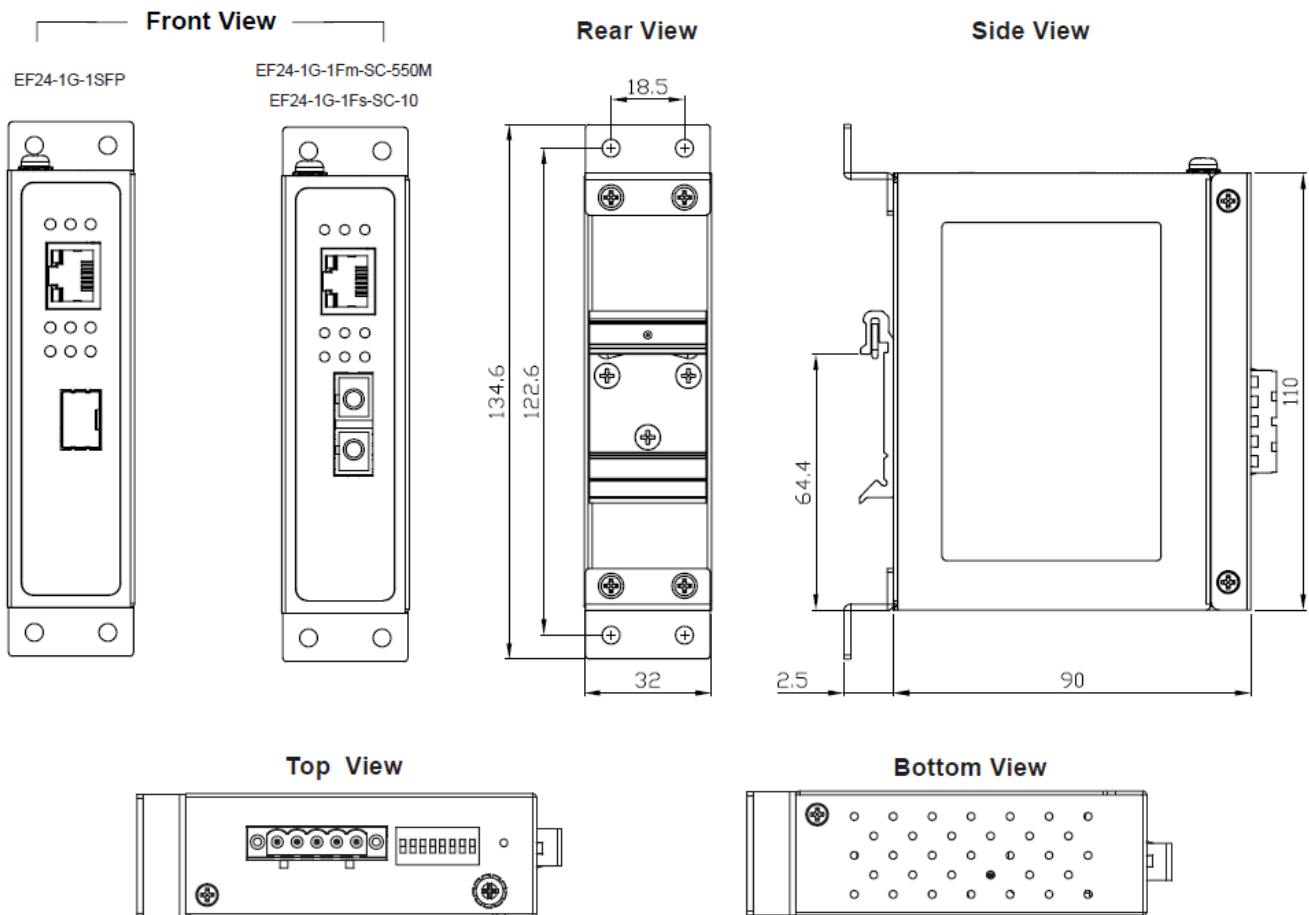
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## Optional Accessories

APU10-108	Y-Type power adaptor,100-240VAC input,0.41A @ 24VDC output, US plug
APU11-108	Y-Type power adaptor,100-240VAC input,0.41A @ 24VDC output, EU plug
WMK-315-Black	Aluminum Wall Mount Kit, Black
LM28-C3S-TI-N	SFP Transceiver, 1250Mbps, 850nmVCSEL, Multi-mode, 550m, 3.3V, -20~85C
LM38-C3S-TI-N	SFP Transceiver, 1250Mbps, 1310nmFP, Multi-mode, 2km, 3.3V, -40~85C
LS38-C3S-TI-N	SFP Transceiver, 1250Mbps, 1310nmFP, Single-mode, 10km, 3.3V, -40~85C
LS38-C3L-TI-N	SFP Transceiver, 1250Mbps, 1310nmDFB, Single-mode, 30km, 3.3V, -40~85C
LM38-A3S-TI-N	SFP Transceiver, 155Mbps, 1310nmLED, Multi-mode, 2km, 3.3V, -40~85C
LS38-A3S-TI-N	SFP Transceiver, 155Mbps, 1310nmFP, Single-mode, 30km, 3.3V, -40~85C

## Mechanical Dimensions



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