



Industrial 1000BaseT(X) to 1000BaseFX Media Converters

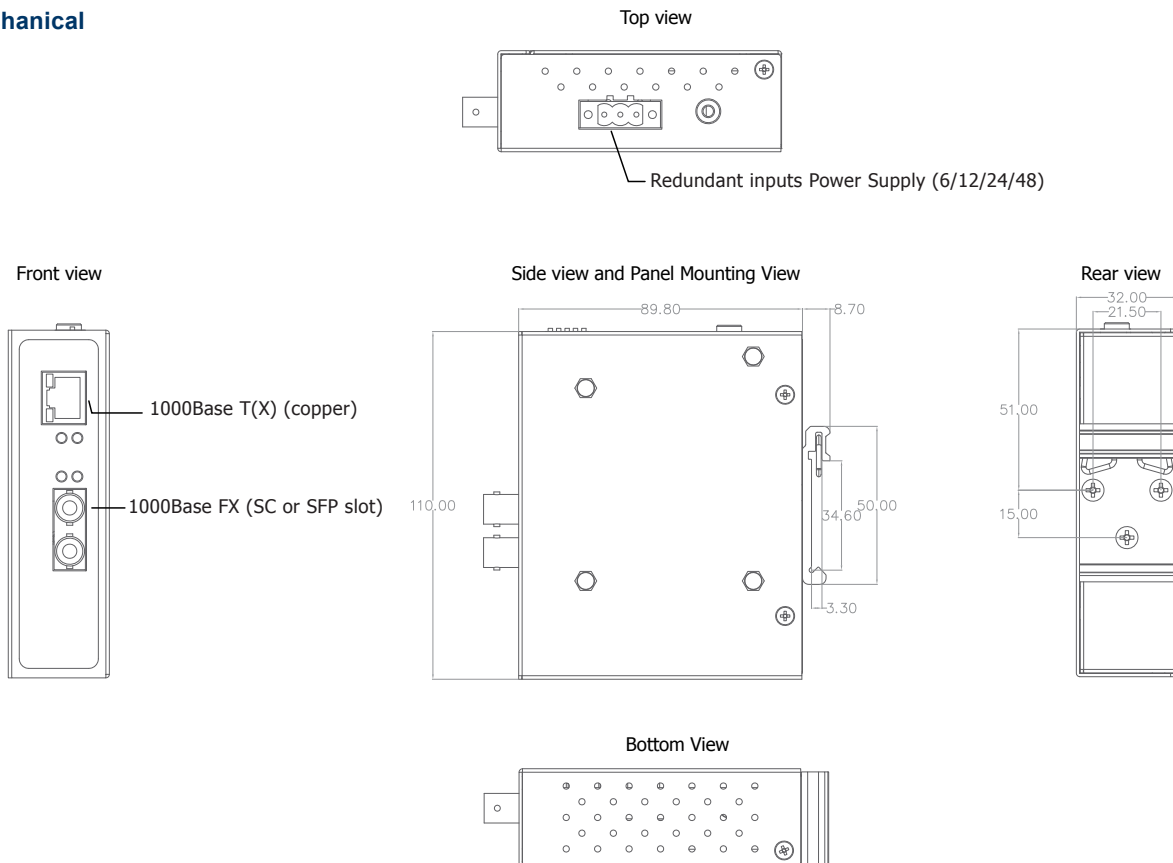
■ ■ EF23G Series

RoHS compliant

- Supports Auto MDI/MDI-X
- Supports Multi-mode 550m, Single-mode 10KM
- Operating temperature -10~70°C

The EF23G Series Industrial Media Converter provide industrial media conversion between 1000BaseT(X) and 1000BaseFX (SC connector or SFP Slot); connection options include multi-mode SC connector (500m), and single- mode SC connector (10km). The EF23G Series media converter is designed for harsh industrial environments, and complies with FCC/CE standards; it also has an operating temperature range from -10 to 70°C.

Mechanical



Specifications

Technology

Standards	IEEE 802.3ab for 1000BaseT(X) IEEE 802.3z for 1000BaseSX/LX/LHX/ZX
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Interface

RJ45 Ports	1000BaseT(X)
Fiber Ports	1000BaseFX (SC connector or SFP slot)
LED Indicators	PWR,TX_LINK,TX_ACT,FX_LINK/ACT

Power Requirements

Input Voltage	6~48 VDC
Input Current	0.5A max, 6 VDC
Connection	Removable 3-pin Screw Terminal Block
Reverse Polarity Protection	Present

Physical Characteristics

Housing	Metal, IP50 protection
Dimension	32 x 90 x 110 mm (1.26 x 3.54 x 4.33 in)
Weight	510g
Installation	DIN-Rail mounting, wall mounting(optional)

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 to 95%, 55°C (non-condensing)

Regulatory Approvals

EMI	FCC Part15, CISPR (EN55022) Class A
EMS	EN61000-4-2 (ESD) Level 3, Criteria B
	EN61000-4-3 (RS) Level 2, Criteria A
	EN61000-4-4 (EFT) Level 3, Criteria A
	EN61000-4-5 (Surge) Level 3, Criteria B/A
	EN61000-4-6 (CS) Level 2, Criteria A
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	554844 hrs (63.33Years) (Data base: MIL-HDBK-217F, GB 25°C)
Warranty Period	5 Years

Optical Fiber Specifications

P/N	1000Base	
	Multi-mode	Single-mode
Distance	300/500m	10Km
Bit rate(Mbps)	1250	1250
Wavelength(nm)	1310(VCSEL)	1310(FP LD)
Application	1000Base-SX	1000Base-LX
TX Power(dBm)	-4~9.5	-3~9.5
RX Sens.(dBm)	<-18	<-20
Remark	EF23-1G-1Fm-SC-500M	EF23-1G-1Fs-SC-10

Ordering Information

EF23-1G-1Fm-SC-500M	1000BaseT(X) to 1000BaseFX Media Converter, Multi-mode, SC connector
EF23-1G-1Fs-SC-10	1000BaseT(X) to 1000BaseFX Media Converter, Single mode, SC connector
EF23-1G-1Fs-SFP	1000BaseT(X) to 1000BaseSX/LX/LHX/ZX Media Converter, SFP Slot

Optional Accessories

US315-12(US-TB3)	3-pin Terminal block (5.08 mm) power adaptor, 100-240 VAC input, 1.25A @ 12 VDC output, US plug
USE315-12(EU-TB3)	3-pin Terminal block (5.08 mm) power adaptor, 100-240 VAC input, 1.25A @ 12 VDC output, EU plug
AD1024-24F	24W/1A DIN-Rail 24 VDC power supply with universal 100~240 VAC/120~370 VDC input
AD1048-24FS	48W/2A DIN-Rail 24 VDC power supply with universal 100~240 VAC/120~370 VDC input
AD1072-24F	72W/3A DIN-Rail 24 VDC power supply with universal 100~240 VAC/120~370 VDC input
AD1100-24F	100W/4A DIN-Rail 24 VDC power supply with universal 100~240 VAC/120~370 VDC input
AD1120-24F	120W/5A DIN-Rail 24 VDC power supply with universal 100~240 VAC/120~370 VDC input
AD1120-48F	120W/2.5A DIN-Rail 48 VDC power supply with universal 100~240 VAC/120~370 VDC input
2ESDP-03P	3-pin 5.08mm Terminal Block with 180° Angle

SFP Transceiver

LM28-C3S-TI-N	1250Mbps, 850nmVCSEL, Multi-mode, 550m, 3.3V, -20~85C
LM38-C3S-TI-N	1250Mbps, 1310nmFP, Multi-mode, 2km, 3.3V, -40~85C
LS38-C3S-TI-N	1250Mbps, 1310nmFP, Single-mode, 10km, 3.3V, -40~85C
LS38-C3L-TI-N	1250Mbps, 1310nmDFB, Single-mode, 30km, 3.3V, -40~85C

Regulatory Approvals and Environmental Type Tests**EMI Immunity Type Tests**

Test	Description	Test Levels	Severity Levels
FCC part 15	Subpart B	—	Class A
EN55022	2006+A1:2007	—	Class A

EMS Tests

Test	Description	Test Levels	Severity Levels	
IEC61000-4-2	ESD	Contact discharge	6KV, Criterion A	Level 3
		Air discharge	8KV, Criterion B	Level 3
IEC61000-4-3	RS	Enclosure ports	3V/m(un-modulated, r.m.s) 80% AM 1KHz, Criterion A	Level 2
IEC61000-4-4	EFT	Power Port	±2KV, Criterion A	Level 3
		Single port	±1KV, Criterion A	Level 3
IEC61000-4-5	Surge	Power Port	±2KV, Criterion A	Level 3
		Single Port	±2KV, Criterion B	Level 3
IEC61000-4-6	CS	Power Port	3V/m(un-modulated, r.m.s) 80% AM 1KHz, Criterion A	Level 2
		Single Port		Level 2

Environmental Type Test

Test	Description	Test Levels	Severity Levels	
MIL-STD-810F	Shock	Impact acceleration& pulse duration	40g@11ms	—
MIL-STD-810F	Freefall	8 corners, 12 edges, 6 faces	122cm	—
MIL-STD-810F	Vibration	Packaged Random waveform	x:2.4 Grms y:1.28 Grms z:3.851.04Grms	—
		Operating Random waveform	x:0.740 Grms y:0.204 Grms z:1.04Grms	—

Atop Technologies, Inc.

TEL : +886-3-5508137
 FAX : +886-3-5508131
 sales@atop.com.tw
 http : //www.atop.com.tw

