



DMC-F100 Series

Industrial 100/10BaseT(X) to 100BaseFX Media Converters

Features

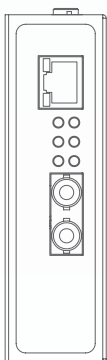
- Supports Auto MDI/MDI-X and Auto Negotiation
- Supports Multi-mode 2KM, Single-mode 30KM
- Supports Link Fault Pass-Through (LFP)
- Jumbo packets up to 9K bytes
- Operating temperature -10~70°C

The DMC-F100 Series Industrial Media Converters provide industrial media conversion between 10/100BaseT(X) and 100BaseFX(SC connector); connection options include multi-mode SC connector (2km), and single-mode SC connector (30km). The DMC-F100 Series Media Converter is designed for harsh industrial environments, and complies with FCC/CE standards.

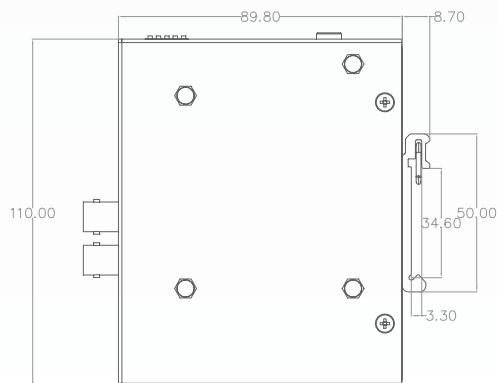
The DMC-F100 Series Media Converter also provides auto MDI/MDI-X, Auto Negotiation, and Link Fault Pass-Through (LFP) function and one 5 pin DIP switch to configure the functions, such as the TX_Duplex mode, FX_Duplex mode, Speed mode, LFP, Auto Negotiation.

Dimensions

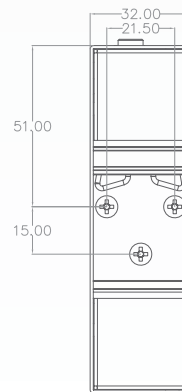
Front view



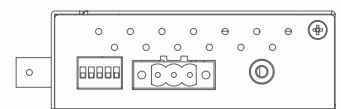
Side view and Panel Mounting View



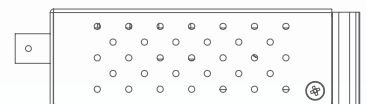
Rear view



Top view



Bottom View



Technical Specifications	
Model Name	DMC-F100-MSC, DMC-F100-SSC
Technology	
Standard	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X), 100BaseFX
Interface	
RJ45 Ports	10/100BaseT(X)
Fiber Ports	100BaseFX (SC connector)
LED Indicators	PWR,SPD,TX_LINK/ACT,TX_FDX/COL,FX_LINK/ACT,FX_FDX/COL
DIP Switch	TX Duplex mode, FX Duplex mode, Speed mode, LFP, Auto Negotiation
Power Management	
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, IP30 protection
Dimensions(W x H x D)	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 (EN55032) 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	823877 hrs (94.04Years) (Data base: MIL-HDBK-217F, GB 25°C)
Warranty Period	5 Year

Optical Fiber Specifications

P/N	100Base	
	Multi-mode	Single-mode
Distance	2Km	30Km
Bit rate(Mbps)	155	155
Wavelength(nm)	1310(LED)	1310(FP)
Application	Fast Ethernet / OC3	S1.1 / Fast Ethernet
TX Power(dBm)	-14~-20	-8~-15
RX Sens.(dBm)	<-31	<-34
Remark	EF23-1-1Fm-SC-2	EF23-1-1Fs-SC-30

Regulatory Approvals

EMI Immunity Type Tests

Test	Description		Test Levels	Severity Levels
FCC part 15	-	Subpart B	-	Class A
EN55032	-	2012+AC:2013	-	Class A

EMS Test

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

Environmental Type Test

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

Ordering Information

Model name	Description
DMC-F100-MSC	100BaseT(X) to 100BaseFX Media Converter, Multi-mode, SC connector
DMC-F100-SSC	100BaseT(X) to 100BaseFX Media Converter, Single mode, SC connector