

IMC-101 系列

工業級乙太網路轉光纖媒體轉換器



特色與優點

- 10/100BaseT(X) 自動協調和自動 MDI/MDI-X
- 支援鏈路故障穿透 (LFPT) 功能
- 透過繼電器輸出發出電源故障及連接埠斷線告警
- 備援電源輸入
- -40 至 75°C 寬操作溫度範圍 (-T 型號)
- 專為危險場所設計 (Class 1 Div. 2/Zone 2 、 IECEx)

認證



簡介

IMC-101 工業級媒體轉換器可提供 10/100BaseT(X) 與 100BaseFX (SC/ST 連接器) 之間的工業級媒體轉換。IMC-101 轉換器擁有絕佳並且可靠的工業級設計，確保工業自動化應用在長時間下可持續運作，且每台 IMC-101 轉換器都具備繼電器輸出告警功能，可防止設備損壞及資料遺失。IMC-101 媒體轉換器專為嚴苛工業環境設計，例如危險區域 (Class 1, Division 2/Zone 2, IECEx)，通過 DNV 認證，並符合 FCC、UL 與 CE 標準。IMC-101 系列可支援 0 到 60°C 的操作溫度，以及 -40 至 75°C 的延伸操作溫度。所有 IMC-101 轉換器均接受 100% 高溫測試。

規格

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	1
100BaseFX Ports (multi-mode SC connector)	IMC-101-M-SC/M-SC-IEX Models: 1
100BaseFX Ports (multi-mode ST connector)	IMC-101-M-ST/M-ST-IEX Models: 1
100BaseFX Ports (single-mode SC connector)	IMC-101-S-SC/S-SC-80/S-SC-IEX/S-SC-80-IEX Models: 1
Magnetic Isolation Protection	1.5 kV (built-in)

Optical Fiber

		100BaseFX			
		Multi-Mode		Single-Mode (40 km)	Single-Mode (80 km)
Fiber Cable Type		OM1	50/125 μm	G.652	G.652
			800 MHz x km		
Typical Distance		4 km	5 km	40 km	80 km
Wavelength	Typical (nm)	1300		1310	1550
	TX Range (nm)	1260 to 1360		1280 to 1340	1530 to 1570
	RX Range (nm)	1100 to 1600		1100 to 1600	1100 to 1600
Optical Power	TX Range (dBm)	-10 to -20		0 to -5	0 to -5

		100BaseFX			
		Multi-Mode		Single-Mode (40 km)	Single-Mode (80 km)
Fiber Cable Type		OM1	50/125 μm	G.652	G.652
			800 MHz x km		
	RX Range (dBm)	-3 to -32		-3 to -34	-3 to -34
	Link Budget (dB)	12		29	29
	Dispersion Penalty (dB)	3		1	1
Note: When connecting a single-mode fiber transceiver, we recommend using an attenuator to prevent damage caused by excessive optical power. Note: Compute the “typical distance” of a specific fiber transceiver as follows: Link budget (dB) > dispersion penalty (dB) + total link loss (dB).					

Power Parameters

Input Current	200 mA @ 12 to 45 VDC
Input Voltage	12 to 45 VDC
Overload Current Protection	Supported
Power Connector	Terminal block
Power Consumption	200 mA @ 12 to 45 VDC

Physical Characteristics

IP Rating	IP30
Housing	Metal
Dimensions	53.6 x 135 x 105 mm (2.11 x 5.31 x 4.13 in)
Weight	630 g (1.39 lb)
Installation	DIN-rail mounting

Environmental Limits

Operating Temperature	Standard Models: 0 to 60°C (32 to 140°F) Wide Temp. Models: -40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

EMC	EN 55032/35
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 PFMF IEC 61000-4-11

Hazardous Locations	IEX Models: UL/cUL Class I Division 2 Groups A/B/C/D, ATEX Zone 2, IECEx All Other Models: UL/cUL Class I Division 2 Groups A/B/C/D, ATEX Zone 2
Maritime	DNV
Safety	UL 60950-1 UL 508
Vibration	IEC 60068-2-6 IEC 60068-2-64
Shock	IEC 60068-2-27
Environmental Testing	IEC 60068-2-1 IEC 60068-2-2 IEC 60068-2-3
Freefall	IEC 60068-2-31 ISTA 2A

MTBF

Time	401,000 hrs
Standards	MIL-HDBK-217F

Warranty

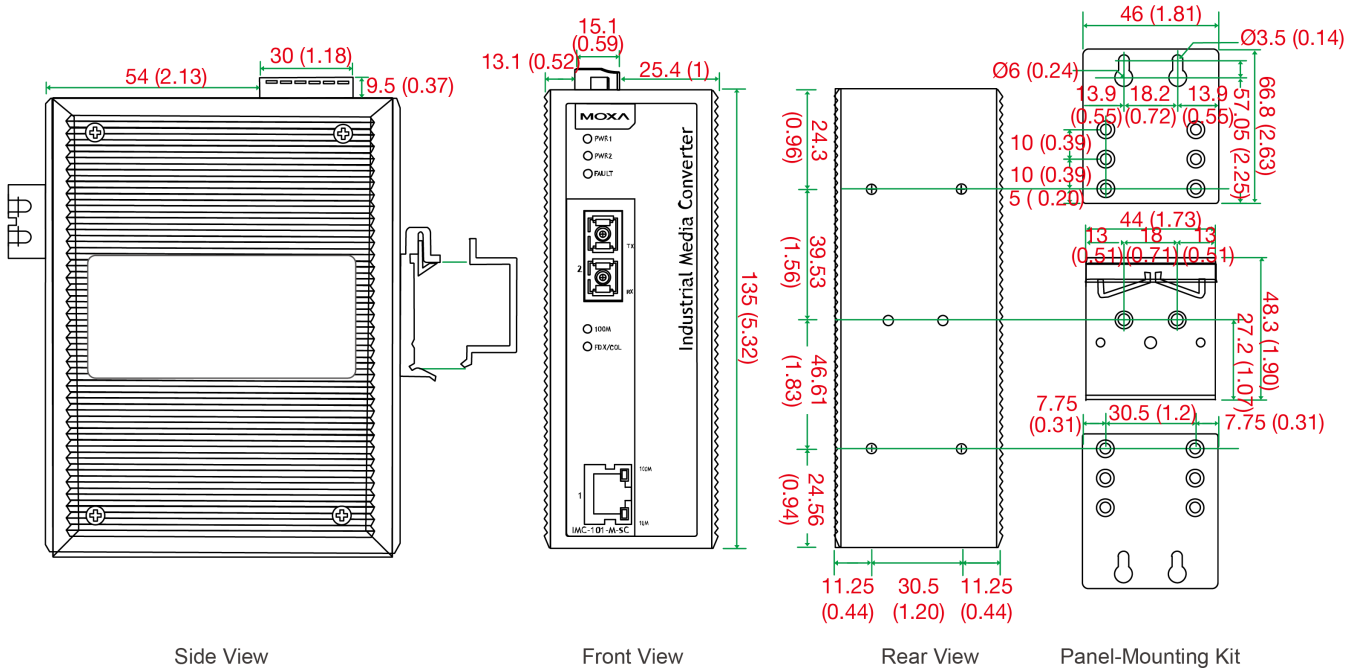
Warranty Period	5 years
Details	See www.moxa.com/tw/warranty

Package Contents

Device	1 x IMC-101 Series converter
Documentation	1 x quick installation guide 1 x warranty card

尺寸

單位：公釐（英吋）



訂購資訊

Model Name	Operating Temp.	Fiber Module Type	IECEX	Fiber Transmission Distance
IMC-101-M-SC	0 to 60°C	Multi-mode SC	–	5 km
IMC-101-M-SC-T	-40 to 75°C	Multi-mode SC	–	5 km
IMC-101-M-SC-IEX	0 to 60°C	Multi-mode SC	P	5 km
IMC-101-M-SC-T-IEX	-40 to 75°C	Multi-mode SC	P	5 km
IMC-101-M-ST	0 to 60°C	Multi-mode ST	–	5 km
IMC-101-M-ST-T	-40 to 75°C	Multi-mode ST	–	5 km
IMC-101-M-ST-IEX	0 to 60°C	Multi-mode ST	P	5 km
IMC-101-M-ST-T-IEX	-40 to 75°C	Multi-mode ST	P	5 km
IMC-101-S-SC	0 to 60°C	Single-mode SC	–	40 km
IMC-101-S-SC-T	-40 to 75°C	Single-mode SC	–	40 km
IMC-101-S-SC-IEX	0 to 60°C	Single-mode SC	P	40 km
IMC-101-S-SC-T-IEX	-40 to 75°C	Single-mode SC	P	40 km
IMC-101-S-SC-80	0 to 60°C	Single-mode SC	–	80 km
IMC-101-S-SC-80-T	-40 to 75°C	Single-mode SC	–	80 km

配件（選購）

Power Supplies

NDR-120-24	120 W/5.0 A DIN-rail 24 VDC power supply, universal 90 to 264 VAC or 127 to 370 VDC input voltage, -20 to 70°C operating temperature
HDR-60-24	60 W/2.5 A DIN-rail 24 VDC power supply, universal 85 to 264 VAC or 120 to 370 VDC input voltage, -30 to 70°C operating temperature

DIN-Rail Mounting Kits

DK-DC50131	DIN-rail mounting kit
------------	-----------------------

Wall-Mounting Kits

WK-51-01	Wall mounting kit with 2 plates (51.6 x 67 x 2 mm) and 6 screws
WK-46	Wall-mounting kit, 2 plates, 8 screws, 46.5 x 66.8 x 1 mm

Rack-Mounting Kits

RK-4U	19-inch rack-mounting kit
-------	---------------------------

© Moxa Inc. 版權所有。2026 年 2 月 04 日更新。

未經 Moxa Inc. 明確書面許可，不得以任何方式複製或使用本文件及其任何部分。產品規格如有變更，恕不另行通知。請至本公司官網了解最新的產品資訊。