

IMC-101G Series

Gigabit Ethernet to Fiber Industrial Media Converters



Features

- 10/100/1000BaseT(X) and 1000BaseSX/LX/LHX/ZX
- Link Fault Pass-Through (LFP)
- Relay output alarm for power failure, port break
- Redundant power inputs
- -40 to 75°C operating temperature range (T models)
- Designed for hazardous locations



Features

Flexible Media Conversion

- 10/100/1000BaseT(X) auto-negotiation and auto-MDI/MDI-X
- 1000BaseSX/LX/LHX/ZX SFP modules

Industrial-grade Reliability

- Link Fault Pass-Through (LFP)
- Relay output alarm for power failure, port break
- Redundant power inputs

Rugged Design

- Models for standard (0 to 60°C) and extended (-40 to 75°C) operating temperatures
- Rugged IP30 case
- DIN-rail or panel mounting
- Designed for hazardous locations

Recommended Accessories

- DR series DIN-rail 24 VDC power supplies

Introduction

The IMC-101G converts between 10/100/1000BaseT(X) and 1000BaseSX/LX/LHX/ZX and is specially designed for reliable and stable operation in harsh industrial environments. The IMC-101G's reliable industrial-grade design helps keep your industrial automation applications running continuously, and each IMC-101G converter comes with a relay output alarm to help prevent damage and loss.

The IMC-101G is available in models that support a standard operating temperature range of 0 to 60°C, and an extended operating temperature range of -40 to 75°C. All IMC-101G models are subjected to a 100% burn-in test.

Specifications

Technology

Standards: IEEE802.3, 802.3z

Interface

RJ45 Ports: 10/100/1000BaseT(X)

Fiber Ports: Optional 1000BaseSX/LX/LHX/ZX (LC connector)

LED Indicators: PWR1, PWR2, FAULT, 10/100M (TP port), 1000M (TP and fiber port)

DIP Switches: Port break alarm mask, Fault Pass-Through, Fiber AN/Force

Alarm Contact: One relay output with current carrying capacity of 1A @ 24 VDC

Optical Fiber

Distance:

Multi mode:

1000BaseSX: 0 to 500 m, 850 nm (50/125 μm, 400 MHz*km)
0 to 275 m, 850 nm (62.5/125 μm, 200 MHz*km)

1000BaseLX: 0 to 1100 m, 1310 nm (50/125 μm, 800 MHz*km)
0 to 550 m, 1310 nm (62.5/125 μm, 500 MHz*km)

Single mode:

1000BaseLX: 0 to 10 km, 1310 nm (9/125 μm, 3.5 PS/(nm*km))

1000BaseLHX: 0 to 40 km, 1310 nm (9/125 μm, 3.5 PS/(nm*km))

1000BaseZX: 0 to 80 km, 1550 nm (9/125 μm, 19 PS/(nm*km))

Power

Input Voltage: 24 VDC (12 to 45 VDC), redundant inputs

Input Current (@24V): 0.2A

Connection: Removable terminal block

Overload Current Protection: 1.1A

Reverse Polarity Protection: Present

Mechanical

Casing: IP30 protection, metal case

Dimensions (W x H x D): 53.6 x 135 x 105 mm
2.11 x 5.31 x 4.13 in.

Weight: 630 g

Installation: DIN-rail or wall mounting (optional kit)

Environment

Operating Temperature: 0 to 60°C (32 to 140°F),
-40 to 75°C (-40 to 167°F) for T models

Storage Temperature: -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Regulatory Approvals

Safety: UL508 (pending)

Hazardous Location:

UL/cUL Class1, Division 2, Groups A, B, C, and D,
ATEX Class1, Zone 2, EEx nC IIC (Pending)

Maritime: GL, DNV (Pending)

EMI: FCC Part 15, CISPR (EN55022) Class A

EMS: EN61000-4-2 (ESD), Level 3
EN61000-4-3 (RS), Level 3
EN61000-4-4 (EFT), Level 3
EN61000-4-5 (Surge), Level 3
EN61000-4-6 (CS), Level 3
EN61000-4-8
EN61000-4-11

Shock: IEC60068-2-27

Freefall: IEC60068-2-32

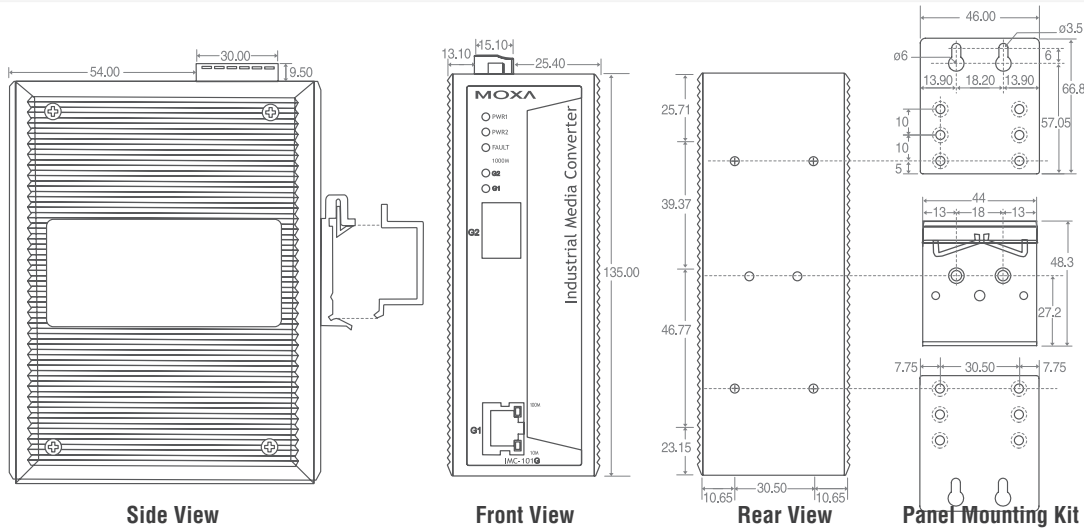
Vibration: IEC60068-2-6

*Please check MOXA's website for the most recent status.

Warranty

5 years

Dimensions (unit = mm)



Ordering Information

Gigabit Media Converters, IMC-101G

IMC-101G: 10/100/1000BaseT(X) to 1000BaseSX/LX/LHX/ZX media converter, 0 to 60°C

IMC-101-T: 10/100/1000BaseT(X) to 1000BaseSX/LX/LHX/ZX media converter, -40 to 75°C

Gigabit Ethernet Modules, SFP-1G

SFP-AGBBBCC-D

Ordering Codes	Number of Gigabit Ports	Fiber ports	FO Connector	Wide Temperature Range
	1: One Fiber port	SX: 1000BaseSX port, 0.5 km LX: 1000BaseLX port, 10 km LHX: 1000BaseLHX port, 40 km ZX: 1000BaseZX port, 80 km	LC: LC Connector	T: -40 to 75°C operating range (Standard models have 0 to 60°C operating range)
Available Models	Standard: • SFP-1GSXLC • SFP-1GLXLC	Long-Haul (40 km): • SFP-1GLHXL	Long-Haul (80 km): • SFP-1GZXLC	Wide Temperature: • SFP-1GSXLC-T (-20 to 75°C) • SFP-1GLXLC-T • SFP-1GLHXL-T • SFP-1GZXLC-T

Optional Accessories

- **DR-4524:** 45W/2A DIN-rail 24 VDC power supply, 85 to 264 VAC input
- **DR-75-24:** 75W/3.2A DIN-rail 24 VDC power supply, 85 to 264 VAC input
- **DR-120-24:** 120W/5A DIN-rail 24 VDC power supply, 88 to 132 VAC, 176 to 264 VAC input by switch
- **WK-46:** Wall mounting kit