

IMC-101G

Industrial Gigabit Ethernet-to-fiber media converter



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



Introduction

The IMC-101G industrial Gigabit media converters are designed to provide reliable and stable 10/100/1000BaseT(X) to 1000BaseSX/LX/LHX/ZX media conversion in harsh industrial environments. The IMC-101G's industrial design is excellent for keeping your industrial automation applications running continuously, and each IMC-101G

converter comes with a relay output warning alarm to help prevent damage and loss. All IMC-101G models are subjected to a 100% burn-in test, and are 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.

Specifications

Technology

Standards:

- IEEE 802.3 for 10BaseT
- IEEE 802.3u for 100BaseT(X) and 100BaseFX
- IEEE 802.3ab for 1000BaseT(X)
- IEEE 802.3z for 1000BaseSX/LX/LHX/ZX

Interface

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

Fiber Ports: 1000BaseSFP slot

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

DIP Switches: Port break alarm mask, Link Fault Pass-Through, SFP Auto/Force

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

Optical Fiber

Multi-mode Transmission Distance:

- 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 Transmission Distance:

- 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))

Physical Characteristics

Housing: Metal, IP30 protection

Dimensions: 53.6 x 135 x 105 mm (2.11 x 5.31 x 4.13 in)

Weight: 630 g

Installation: DIN-Rail mounting, wall mounting (with optional kit)

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: -40 to 85°C (-40 to 185°F)

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

Power Requirements

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

Input Current: 110 mA @ 24 VDC

Connection: Removable terminal block

Overload Current Protection: 2.5 A

Reverse Polarity Protection: Present

Standards and Certifications

Safety: UL 508

Hazardous Location: UL/cUL Class I Division 2 Groups A/B/C/D, ATEX Zone 2 Ex nC IIC

EMC: CE, FCC

EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A

EMS:

- EN 61000-4-2 (ESD) Level 3,
- EN 61000-4-3 (RS) Level 3,
- EN 61000-4-4 (EFT) Level 3,
- EN 61000-4-5 (Surge) Level 2,
- EN 61000-4-6 (CS) Level 3,
- EN 61000-4-8,
- EN 61000-4-11

Shock: IEC 60068-2-27

Freefall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Green Product: RoHS, CRoHS, WEEE

MTBF (mean time between failures)

Time: 500,540 hrs

Database: Telcordia (Bellcore), GB

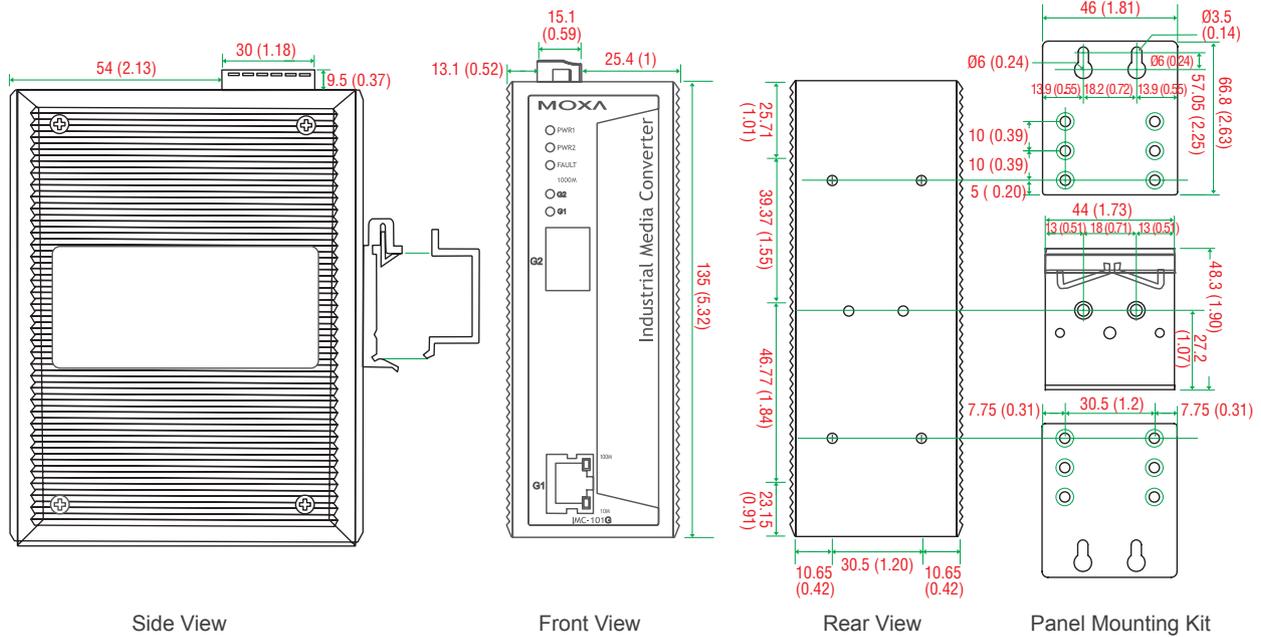
Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)



Ordering Information

Available Models

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

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

Optional Accessories (can be purchased separately)

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 or 176 to 264 VAC input by switch

WK-46: Wall mounting kit

RK-4U: 4U-high 19" rack mounting kit

SFP 1G Series: 1G-port Gigabit Ethernet SFP modules

Package Checklist

- 1 IMC-101G media converter
- Quick installation guide (printed)
- Warranty card