

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:** 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

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)

Operating Humidity: 5 to 95% RH

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

Power Requirements

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

Input Current: 0.11A (@ 24 V)

Connection: Removable terminal block

Overload Current Protection: 1.1A

Reverse Polarity Protection: Present

Regulatory Approvals

Safety: UL508

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

Freefall: IEC60068-2-32

Shock: IEC60068-2-27

Vibration: IEC60068-2-6

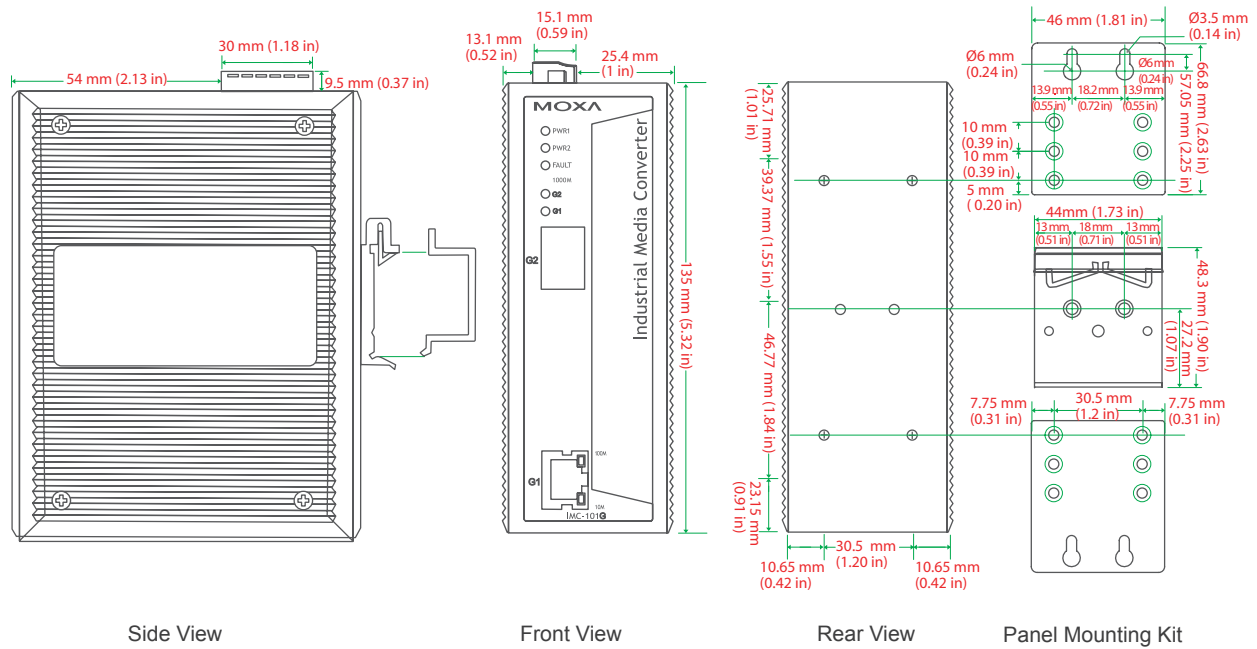
MTBF: 500,000 hrs; Database: Telcordia (Bellcore), GB

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions



: 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