

# 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

The certification logos shown here apply to some or all of the products in this section. For details, see "Regulatory Approvals" under "Specifications" below.



### 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

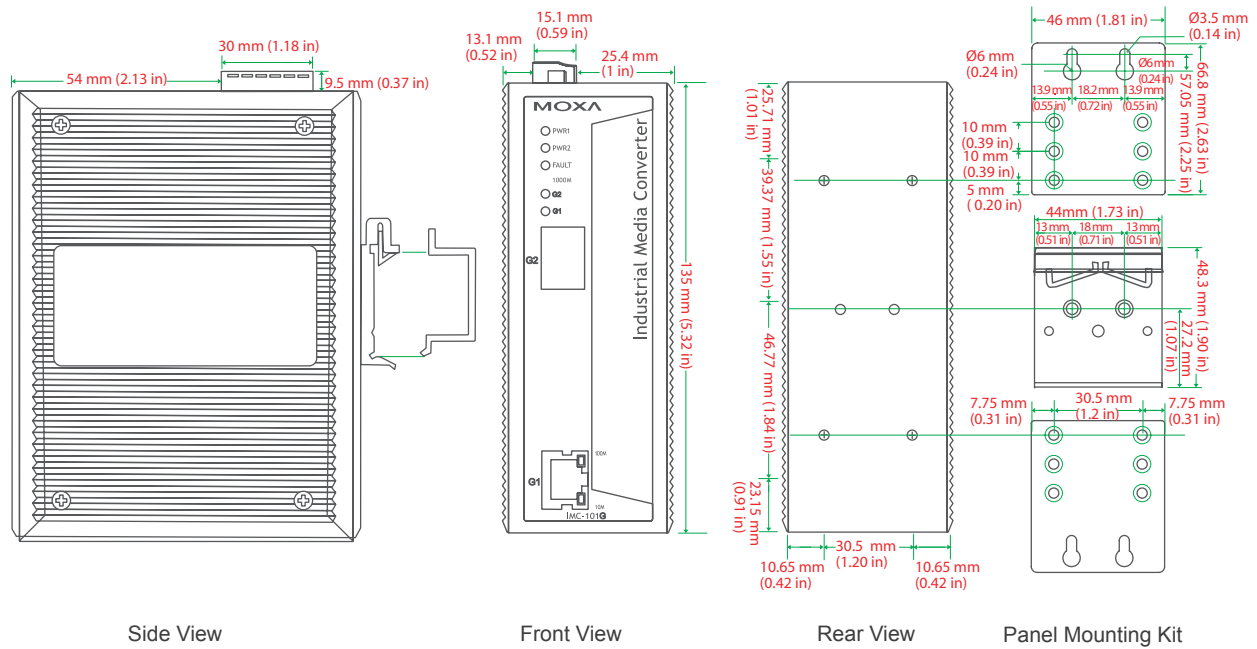
##### MTBF:

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

#### Warranty

- Warranty Period:** 5 years
- Details:** See [www.moxa.com/warranty](http://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