

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. Please see the **Specifications** section or Moxa's website for details.



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

- 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 Requirements

- Input Voltage:** 24 VDC (12 to 45 VDC), redundant inputs
Input Current (@ 24 V): 0.11A
Connection: Removable terminal block
Overload Current Protection: 1.1A
Reverse Polarity Protection: Present

Physical Characteristics

- Housing:** Metal, IP30 protection
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 mounting, wall mounting (optional kit)

Environmental Limits

- 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

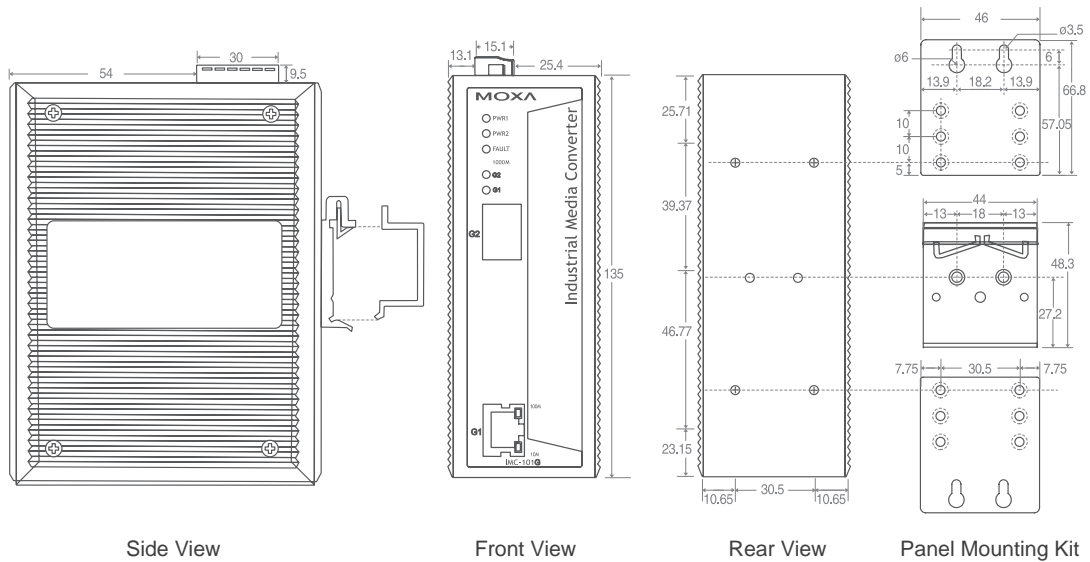
- Safety:** UL508
EMI: FCC Part 15, CISPR (EN55022) class A
EMS: EN61000-4-2 (ESD), level 3
 EN61000-4-3 (RS), level 3
 EN61000-4-4 (EFT), level 3
 EN61000-4-5 (Surge), level 3
 EN61000-4-6 (CS), level 3
 EN61000-4-8
 EN61000-4-11
Shock: IEC60068-2-27
Freefall: IEC60068-2-32
Vibration: IEC60068-2-6
MTBF: 500,000 hrs
 Database: Telcordia (Bellcore), GB

*Please check Moxa's website for the most up-to-date status.

Warranty

5 years (see www.moxa.com/warranty for details)

Dimensions (unit = mm)



Ordering Information

- **IMC-101G:** Industrial 10/100/1000BaseT(X) to 1000BaseSX/LX/LHX/ZX media converter, 0 to 60°C
 - **IMC-101G-T:** Industrial 10/100/1000BaseT(X) to 1000BaseSX/LX/LHX/ZX media converter, -40 to 75°C
- * IMC-101G series supports 1 SFP slot. Please see page 3-33 for the product information of SFP-1G series Gigabit Ethernet SFP modules.

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