

# IMC-101 Series

## Industrial 10/100BaseT(X) to 100BaseFX media converters



- > 10/100BaseT(X) auto-negotiation and auto-MDI/MDI-X
- > Link Fault Pass-Through (LFP)
- > Power failure, port break alarm by relay output
- > Redundant power inputs
- > -40 to 75°C operating temperature range (T models)
- > Designed for hazardous locations (Class 1 Div. 2/Zone 2)



### Introduction

The IMC-101 industrial media converters provide industrial-grade media conversion between 10/100BaseT(X) and 100BaseFX (SC/ST connectors). The IMC-101 converters' reliable industrial design is excellent for keeping your industrial automation applications running continuously, and each IMC-101 converter comes with a relay output warning alarm to help prevent damage and loss. The IMC-101 media converters are designed for harsh industrial environments, such

as in hazardous locations (Class 1, Division 2/Zone 2, DNV, and GL Certification), and comply with FCC, TV, UL, and CE standards. The IMC-101 series is available in models that support an operating temperature from 0 to 60°C, and an extended operating temperature from -40 to 75°C. All IMC-101 series converters are subjected to a 100% burn-in test.

### Specifications

#### Technology

##### Standards:

IEEE 802.3 for 10BaseT

IEEE 802.3u for 100BaseT(X) and 100BaseFX

##### Interface

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

**Fiber Ports:** 100BaseFX (SC/ST connectors)

**LED Indicators:** PWR1, PWR2, FAULT, 10/100M (TP port), 100M (Fiber port), FD/ST (Fiber port)

**DIP Switches:** 100BaseFX Full/Half duplex selection, port break alarm mask

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

##### Optical Fiber

	100BaseFX		
	Multi-mode	Single-mode	Single-mode, 80 km
Wavelength	1300 nm	1310 nm	1550 nm
Max. TX	-10 dBm	0 dBm	0 dBm
Min. TX	-20 dBm	-5 dBm	-5 dBm
RX Sensitivity	-32 dBm	-34 dBm	-34 dBm
Link Budget	12 dB	29 dB	29 dB
Typical Distance	5 km <sup>a</sup> 4 km <sup>b</sup>	40 km <sup>c</sup>	80 km <sup>d</sup>
Saturation	-6 dBm	-3 dBm	-3 dBm

a. 50/125 μm, 800 MHz\*km fiber optic cable  
 b. 62.5/125 μm, 500 MHz\*km fiber optic cable  
 c. 9/125 μm, 3.5 PS/(nm\*km) fiber optic cable  
 d. 9/125 μm, 19 PS/(nm\*km) fiber optic cable

#### 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:** 160 mA @ 24 VDC

**Connection:** Removable terminal block

**Overload Current Protection:** 1.1 A

**Reverse Polarity Protection:** Present

#### Standards and Certifications

**Safety:** UL 508, UL 60950-1, EN 60950-1

**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

**Marine:** DNV, GL

**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:** 401,000 hrs

**Database:** MIL-HDBK-217F, GB 25°C

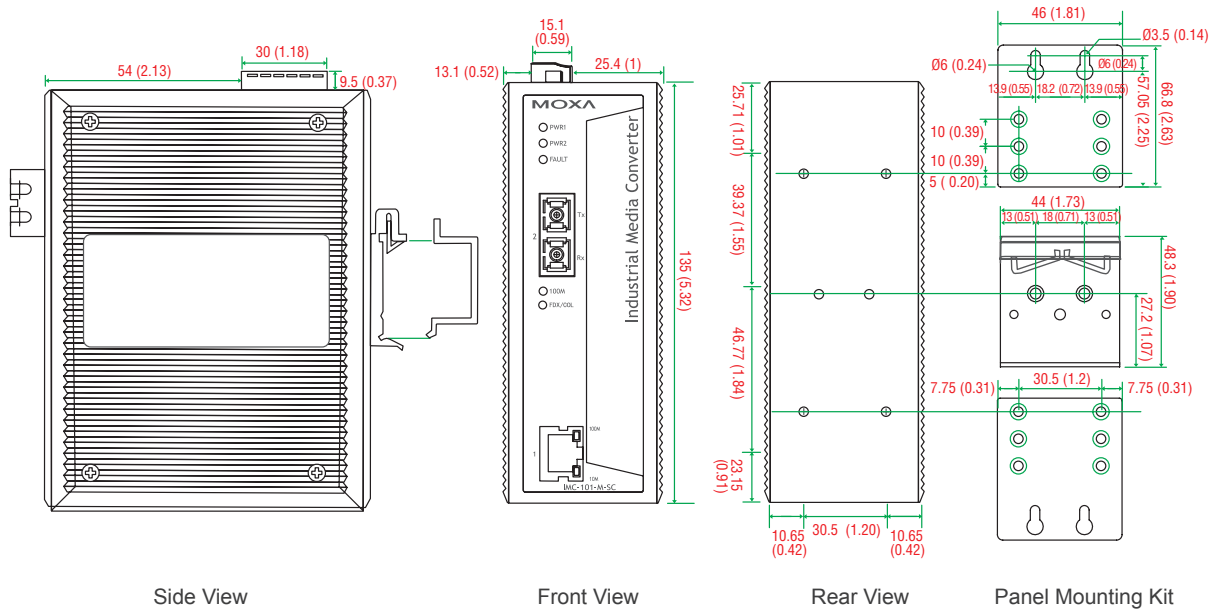
**Warranty**

**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

**Dimensions**

Unit: mm (inch)



**Ordering Information**

**Available Models**

**IMC-101-M-SC:** Industrial 10/100BaseT(X) to 100BaseFX media converter, multi mode, SC connector, 0 to 60°C operating temperature

**IMC-101-M-ST:** Industrial 10/100BaseT(X) to 100BaseFX media converter, multi mode, ST connector, 0 to 60°C operating temperature

**IMC-101-S-SC:** Industrial 10/100BaseT(X) to 100BaseFX media converter, single mode, SC connector, 40 km, 0 to 60°C operating temperature

**IMC-101-S-SC-80:** Industrial 10/100BaseT(X) to 100BaseFX media converter, single mode, SC connector, 80 km, 0 to 60°C operating temperature

**IMC-101-M-SC-T:** Industrial 10/100BaseT(X) to 100BaseFX media converter, multi mode, SC connector, -40 to 75°C operating temperature

**IMC-101-M-ST-T:** Industrial 10/100BaseT(X) to 100BaseFX media converter, multi mode, ST connector, -40 to 75°C operating temperature

**IMC-101-S-SC-T:** Industrial 10/100BaseT(X) to 100BaseFX media converter, single mode, SC connector, 40 km, -40 to 75°C operating temperature

**IMC-101-S-SC-80-T:** Industrial 10/100BaseT(X) to 100BaseFX media converter, single mode, SC connector, 80 km, -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/176 to 264 VAC input by switch

**WK-46:** Wall mounting kit

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

**SC to ST Connectors:** See Appendix A

**Package Checklist**

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

# Tento produkt můžete zakoupit u společnosti AutoCont IPC a.s.



## AutoCont IPC a.s.

Váš dodavatel průmyslových počítačů, komponent a speciálních průmyslových IT systémů.

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### PRŮMYSLOVÉ POČÍTAČE

fanless embedded PC, do racku, ...



### POČÍTAČE S DISPLEJEM

panelové PC, terminály, do vozidel, ...



### AUTOMATIZACE A SBĚR DAT

převodníky, karty, moduly, switche, ...



### PERIFERIE A KOMPONENTY

monitory, klávesnice, desky, skříně, ...



### NOTEBOOKY A TABLETY

odolné, windows, android, IP65, ...



### INFORMAČNÍ KIOSKY

interiérové, venkovní, ...



### MEDICÍNSKÁ TECHNIKA

počítače, tablety, LCD, klávesnice, ...



### SOFTWAREVÁ ŘEŠENÍ

pro výrobu, zaměstnance, kiosky, ...



### PŘEJÍT DO E-SHOPU

[eshop.autocont-ipc.cz](http://eshop.autocont-ipc.cz)



### DOPRAVA ZDARMA

Doprava zdarma v ČR a SR při objednávce nad 10 000 Kč bez DPH nebo nad 400 EUR.



### PRODLOUŽENÁ ZÁRUKA

Záruka 2 roky na vyráběné počítače s možností jejího prodloužení až na 5 let.



### ODMĚNA ZA VĚRNOST

Pravidelní zákazníci u nás nakupují za nižší ceny. Výše slevy se odvíjí od realizovaného obrátu.



### SERVIS ON-SITE A IN-TIME

K projektovým dodávkám nabízíme rozšířenou podporu a servis s garancí výměny zařízení do 48 hodin.