

# IMC-21 Series

## Industrial 10/100BaseT(X) to 100BaseFX & 10BaseT to 10BaseFL Media Converter



### Features

- Power inputs: 12 to 45 VDC, or 18 to 30 VAC (47-63 Hz)
- Supports Link Fault Pass-Through (LFP)
- DIN-Rail mounting ability
- Multi mode, single mode with SC or ST fiber connector available
- -10 to 60°C operating temperature range
- DIP Switch to select FDX/HDX/10/100/Auto/Force



### Overview

IMC-21 industrial media converters are entry-level 10/100BaseT(X) to 100BaseFX and 10BaseT to 10BaseFL media converters that are specially designed for reliable and stable operation in harsh industrial environments. IMC-21 is a cost-effective solution that runs on either a 12 to 45

VDC power input or 18 to 30 VAC power input. IMC-21 can operate reliably in temperatures ranging from -10 to 60°C, and the rugged hardware design helps ensure that your Ethernet equipment can withstand demanding industrial conditions.

### DC or AC Power Input Options

With the IMC-21 media converter, you can choose either a 12 to 45 VDC power input or 18 to 30 VAC power input. The 24 VAC power input is designed especially for applications in

the building automation field where access to power inputs is often restricted.

### Link Fault Pass-Through

IMC-21's "Link Fault Pass-Through" feature overcomes a problem encountered when using traditional media converters. The problem is that when one side of the link fails, the other side continues transmitting packets, and then

waits for a response that never arrives from the disconnected side. What IMC-21 does is force the link to shut down as soon as it notices that the other link has failed, giving the application software a chance to react.

### Ordering Information

**IMC-21-M-SC:** Industrial 10/100BaseT(X) to 100BaseFX media converter, multi mode, SC connector, -10 to 60°C

**IMC-21-M-ST:** Industrial 10/100BaseT(X) to 100BaseFX media converter, multi mode, ST connector, -10 to 60°C

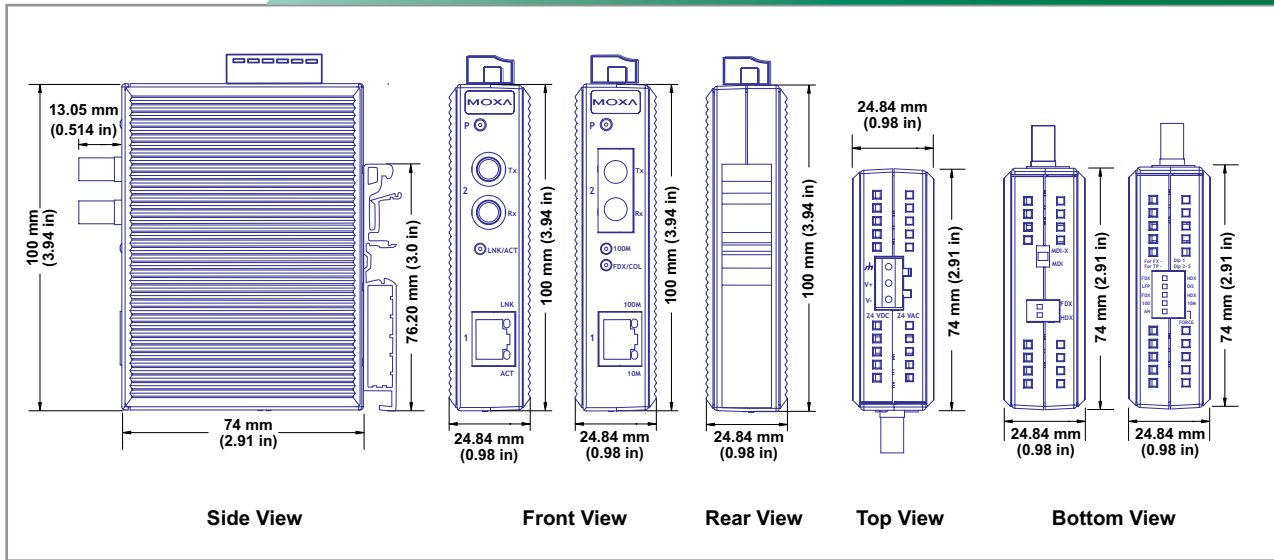
**IMC-21-S-SC:** Industrial 10/100BaseT(X) to 100BaseFX media converter, single mode, SC connector, -10 to 60°C

**IMC-21-M-ST-FL:** Industrial 10BaseT to 10BaseFL media converter, multi mode, ST connector, -10 to 60°C

#### All items include

- User's Manual

## Dimensions



## Specifications

### Technology

**Standards:** IEEE802.3, 802.3u, 802.3x

### Interface

#### RJ45 ports:

IMC-21 (10/100BaseTX to 100BaseFX): 100BaseTX

IMC-21 (10BaseT to 10BaseFL): 10BaseT

#### Fiber ports:

IMC-21 (10/100BaseTX to 100BaseFX): 100BaseFX (SC/ST Connectors)

IMC-21 (10BaseT to 10BaseFL): 10BaseFL (ST Connector only)

#### LED Indicators:

IMC-21 (10/100BaseTX to 100BaseFX): Power, 10/100M (TP port), 100M (Fiber port), FDX/COL (Fiber port)

IMC-21 (10BaseT to 10BaseFL): Power, LNK/ACT (Fiber port), LNK and ACT (TP port)

#### DIP Switch:

IMC-21 (10/100BaseTX to 100BaseFX):

- TP port's, Half/Full mode, and Force/Auto mode are DIP switch selectable
  - Fiber connection's Half/Full mode is DIP switch selectable
  - Link Fault Pass-Through (LEP) is DIP switch selectable
- IMC-21 (10BaseT to 10BaseFL): TP port's MDI/MDI-X and half/full mode are DIP Switch selectable

### Optical Fiber

#### Distance:

10BaseFL: 2 km, 820 nm

100BaseFX (Multi mode): 5 km, 1310 nm

100BaseFX (Single mode): 40 km, 1310 nm

#### Min. TX Output:

10BaseFL: -16 dBm

100BaseFX (Multi mode): -20 dBm

100BaseFX (Single mode): -5 dBm

#### Max. TX Output:

10BaseFL: -7 dBm

100BaseFX (Multi mode): -14 dBm

100BaseFX (Single mode): 0 dBm

#### Sensitivity:

10BaseFL: -34.1 dBm

100BaseFX (Multi mode): -34 to -30 dBm

100BaseFX (Single mode): -36 to -32 dBm

### Power

**Input Voltage:** 12 to 45 VDC, 18 to 30 VAC (47-63 Hz)

**Power Consumption (@24V):** 5W

**Connection:** Removable 3-contact Terminal Block

**Overload Current Protection:** 1.1A

**Reverse Polarity Protection:** Present

### Mechanical

**Casing:** IP30 protection, plastic case

**Dimensions:** 25 x 109 x 97 mm (W x H x D)

**Weight:** 125 g

**Installation:** DIN-Rail mounting

### Environmental

**Operating Temperature:** -10 to 60°C (14 to 140°F)

**Storage Temperature:** -40 to 70°C (-40 to 158°F)

**Ambient Relative Humidity:** 5 to 90% (non-condensing)

### Regulatory Approvals

**Safety:** UL 508 (Pending)

**EMI:** FCC Part 15, CISPR (EN55022) class A

**EMS:** EN61000-4-2 (ESD), EN61000-4-3 (RS),  
EN61000-4-4 (EFT), EN61000-4-5 (Surge),  
EN61000-4-6 (CS)

**Shock:** IEC 60068-2-27

**Free Fall:** IEC60068-2-32

**Vibration:** IEC60068-2-6

**Warranty:** 5 years