

IMC-21 Series Entry-level Industrial Media Converter

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

Features

- Supports Link Fault Pass-Through (LFP)
- Multi mode, single mode with SC or ST fiber connector available
- Power inputs support 12 to 45 VDC or 18 to 30 VAC (47-63 Hz)
- DIN-Rail mounting ability
- Operating temperature range from -10 to 60°C
- TP port's connection speed, Half/Full duplex mode, and Force/Auto mode are DIP switch selectable
- Fiber port's Half/Full duplex mode is DIP switch
- TP port's MDI/MDI-X and Half/Full mode are DIP switch selectable (for IMC-21-M-ST-FL)



Overview

MOXA Industrial Media Converter IMC-21 series consists of 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 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 power input 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.

Specifications

Technology

Standards: IEEE802.3, 802.3u, 802.3x

Interface

RJ45 ports:

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

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

Fiber ports:

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

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

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

Power, 10/100M (TP port), 100M (Fiber port), FDX/COL (Fiber port)
For IMC-21 (10BaseT to 10BaseFL):

Power, LNK/ACT (Fiber port), LNK and ACT (TP port)

DIP Switch: For 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

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

TP port's MDI/MDI-X and half/full mode are DIP Switch selectable

Specifications

Optical Fiber

Distance: 10BaseFL: 2 km, 820 nm
 100BaseFX (Multi mode): 5 km, 1310 nm
 100BaseFX (Single mode): 40 km, 1310 nm

Max. 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: 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 95% (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)

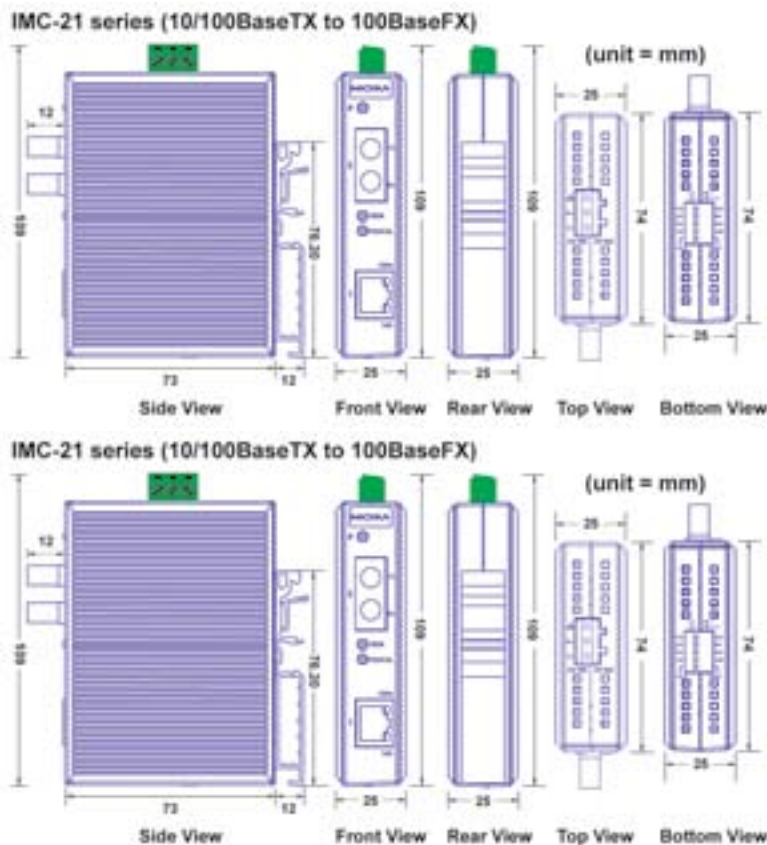
Shock: IEC 60068-2-27

Free Fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

WARRANTY: 5 years

Dimensions



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