

IMC1100

Industrial Media Converter

10/100Base-T to 100Base-X



Overview

The IMC1100 series Industrial Media Converter is designed to extend the distance of a network by converting Fast Ethernet data between twisted pair cabling and multi-mode or single-mode fiber-optic cabling.

The IMC1100 features 1 x 100Base-FX fiber port and 1 x 10/100Base-TX twisted-pair port. The fiber optic port features SC connector and operating distance from 2km to 120km depending on different Model. The twisted-pair port has 1 x RJ-45 connector with a maximum operating distance of 100m.

The IMC1100 Industrial Ethernet Media Converter is designed to stand up to extreme temperature, surges, vibrations, and shocks found in industrial automation, government, military, oil & gas, mining and outdoor applications, such as traffic management, oil and gas pipelines.

The IMC1100 series enables real-time deterministic network operation, requires no configuration and will instantly operate as soon as you power it up. Additionally, they can be installed by DIN-rail or wall-mounted, allowing users to deploy any mix of network conversions required.

Features

- UTP to fiber media converter
- RJ45 support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Store-and-forward & Cut-thought working mode optional
- Built-in LFP (Link-fault-pass-through) function
- Jumbo frame: 9kbytes
- Support wide operating temperature (-40 °C ~ +85 °C)
- Wide-range redundant power design (12~56VDC)
- Power polarity reverse protect
- Overload current resettable fuse present

- IP-40 protection
- Provide EFT protection for Power line
- Support Ethernet ESD protection
- DIN-Rail and Wall-Mounted Installation
- Low power consumption

Applications



DIP Switch

DIP Switch Define	Dip1	Dip2	Dip3	Dip4
Modified Cut-through Mode	ON	ON	N/C	OFF
Converter Mode	ON	OFF		OFF
Cut-through	OFF	ON		OFF
Store and forward mode	OFF	OFF		OFF
LFP Enable	OFF	OFF		ON

Technical Specifications

Standards	IEEE802.3 10Base-T IEEE802.3u 100Base-TX IEEE802.3x Flow control and back pressure IEEE802.1d Spanning Tree
Performance	Processing Type: Store and Forward, Cut-through Back Bandwidth: 0.4Gbps MAC Address Size: 2Kbit Packet Buffer Size: 1Mbit Time Delay: <10us Frame: 9kbytes
Copper Port	Data Rate: 10/100M Connector: RJ45 Distance: 100m
Fiber Port	Data Rate: 155M Connector: SC as default, FC/ST Optional Distance: MMF 2km,SMF 20/40/80/100/120km, Bi-di:20/40/80/100/120km
LED indicators	PWR1: ON=Power Connected PWR2: ON= Power Connected FL/A: ON=Fiber Connected; Active=Data Transmitting TL/A: ON=Copper Connected; Active= Data Transmitting 100M: ON=100M; OFF=10M
Power	Input Voltage: 12~56 VDC, redundant power inputs Power Consumption: ≤5W Protection: Overload Current; Reverse Polarity Connector: Terminal Block
Environment	Operating Temperature: -40 °C ~ +85 °C Storage Temperature: -40 °C ~ +95 °C Relative Humidity: 5-95% (no condensation)
Physical Characteristics	Housing: IP40 Protection, Aluminum Alloy Installation: DIN-rail mounting, wall mounting(with optional kit) Dimension: 115*81*35mm(device); 220*175*73mm(packing) Weight: 0.30kg(device); 0.43kg(device with packing)

Order Information

Model	Description
IMC1100-SFP	10/100M,SFP Slot
IMC1100-M02	10/100M,MMF,1310nm,SC,2km
IMC1100-S20	10/100M,SMF,1310nm,SC,20km
IMC1100-A20	10/100M,Bi-di,TX1310/RX1550nm,SC,20km
IMC1100-B20	10/100M,Bi-di,TX1550/RX1310nm,SC,20km
Note: AC/DC power supply purchased separately	

Related Products

Model	Description
DIN-rail Power supply	
HDR-15-24	DIN-rail 15W, 85~264Vac input, 24V0.63A output
SFP Module	
SFP-M1585L-02I	155M MM 850nm LC 550m DDM, Industrial Grade
SFP-M1513L-02I	155M MM 1310nm LC 2km DDM, Industrial Grade
SFP-S1513L-20I	155M SM 1310nm LC 20km DDM, Industrial Grade
SFP-S1535L-20I	155M SM TX1310/RX1550nm LC 20km DDM, Industrial Grade
SFP-S1553L-20I	155M SM TX1550/RX1310nm LC 20km DDM, Industrial Grade
Long distance 40/60/80/100/120km is available	
Installation Accessories	
TK12	Wall-mounted kits, 118*18*16mm, ϕ 3.5mm L=12mm
A02	Side DIN-rail mounted kits, 72.7*70*8.5mm, ϕ 3.5mm L=6mm
CK01	Rack-mounted bracket with Din-rail, 483*215*130mm



TK12 Wall-mounted kits

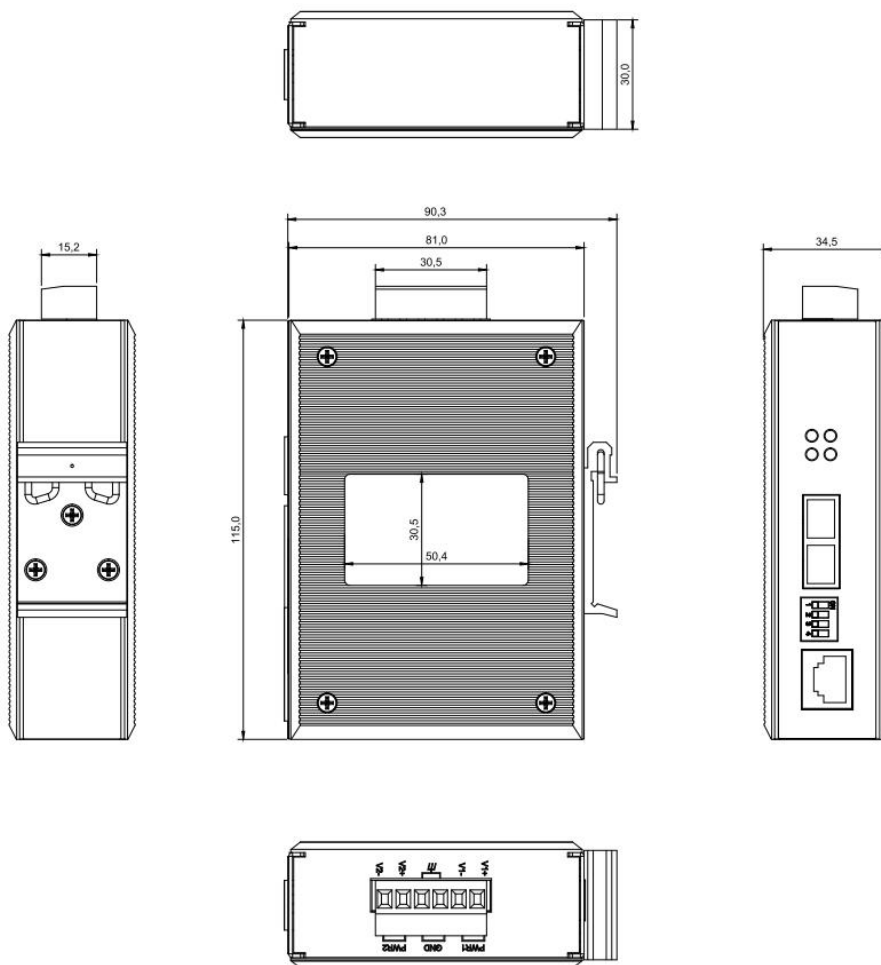


A02 Side DIN rail mounted kits



CK01 Rack-mounted bracket

Structure diagram (mm)



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