

IMC3100

Industrial Media Converter

10/100/1000Base-T to 1000Base-X



Overview

The IMC3100 series Industrial Media Converter is designed to extend the distance of a network by converting Giga Ethernet data between twisted pair cabling and multi-mode or single-mode fiber-optic cabling.

The IMC3100 features 1 x 1000Base-X fiber port and 1 x 10/100/1000Base-T twisted-pair port. The fiber optic port features SC connector and operating distance from 550 to 120km depending on different Model. The twisted-pair port has 1 x RJ-45 connector with a maximum operating distance of 100m.

The IMC3100 Industrial Gigabit 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 IMC3100 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
- RJ-45 port support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Store-and-forward switching architecture
- 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 Mounting Installation
- Low power consumption

Applications



Technical Specifications

Standards	IEEE802.3 10Base-T IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-SX/LX standards IEEE802.3x Flow control and back pressure IEEE802.1d Spanning Tree
Performance	Processing Type: Store and Forward Back Bandwidth: 4.0Gbps MAC Address Size: 1Kbit Packet Buffer Size: 1Mbit Time Delay: <10us Frame: 10Kbytes
Copper Port	Data Rate: 10/100/1000M Connector: RJ45 Distance: 100m
Fiber Port	Data Rate: 1.25G Connector: SC as default, FC/ST/SFP Slot Optional Distance: MMF 550m/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
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
IMC3100-SFP	10/100/1000M,SFP Slot
IMC3100-M05	10/100/1000M,MMF,850nm,SC,550m
IMC3100-S20	10/100/1000M,SMF,1310nm,SC,20km
IMC3100-A20	10/100/1000M,Bi-di,TX1310/RX1550nm,SC,20km
IMC3100-B20	10/100/1000M,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-M1285L-05I	1.25G MM 850nm LC 550m DDM, Industrial Grade
SFP-M1213L-02I	1.25G MM 1310nm LC 2km DDM, Industrial Grade
SFP-S1213L-20I	1.25G SM 1310nm LC 20km DDM, Industrial Grade
SFP-B1235L-20I	1.25G SM TX1310/RX1550nm LC 20km DDM, Industrial Grade
SFP-B1253L-20I	1.25G 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

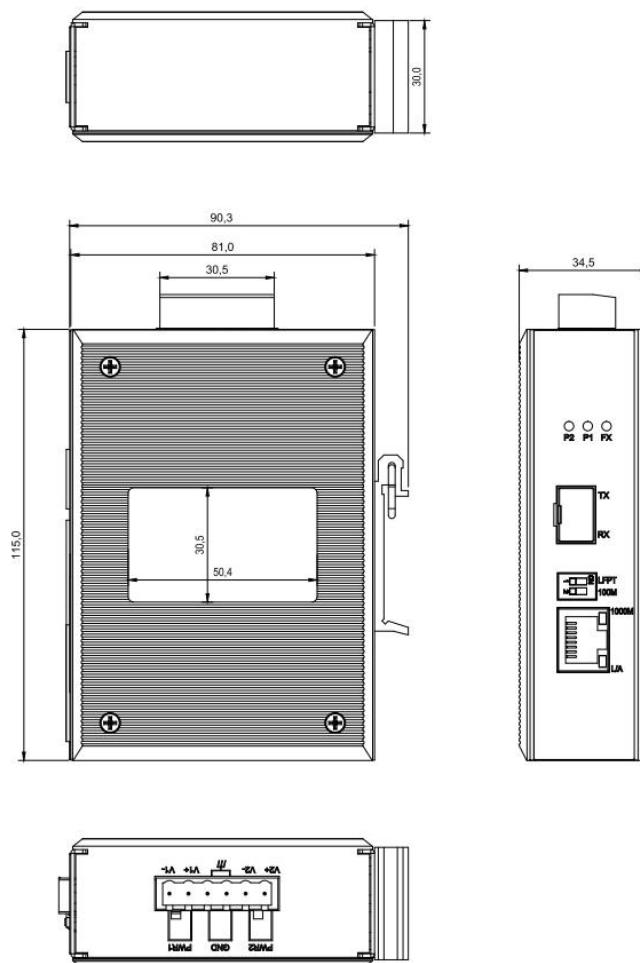


A02 Side DIN rail mounted kits



CK01 Rack-mounted bracket

Structure diagram (mm)



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