

# IMC3100P

## Industrial Media Converter

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



### Overview

The IMC3100P Industrial POE Media Converter is the ideal solution for powering remote devices such as IP phones, video cameras, wireless access points, alarms, traffic controllers, sensors, and tracking devices, which are installed 100m away from a Power over Ethernet converter. In addition to transmitting data, the twisted-pair port also injects power down the cable, allowing a remote Power over Ethernet Device to operate without the need for any additional power source. All Power over Ethernet Powered Devices (IEEE 802.3af/at compliant) are supported, as the Power Sourcing Equipment (PSE) device can deliver a full 15.4W / 30W of power to the remote PD device.

The IMC3100P 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 IMC3100P Industrial Gigabit Ethernet Media Converter is designed to stand up to extreme temperatures, surges, vibrations, and shocks found in industrial automation, government, military, oil & gas, mining, and outdoor applications, such as traffic management, oil and gas pipelines.

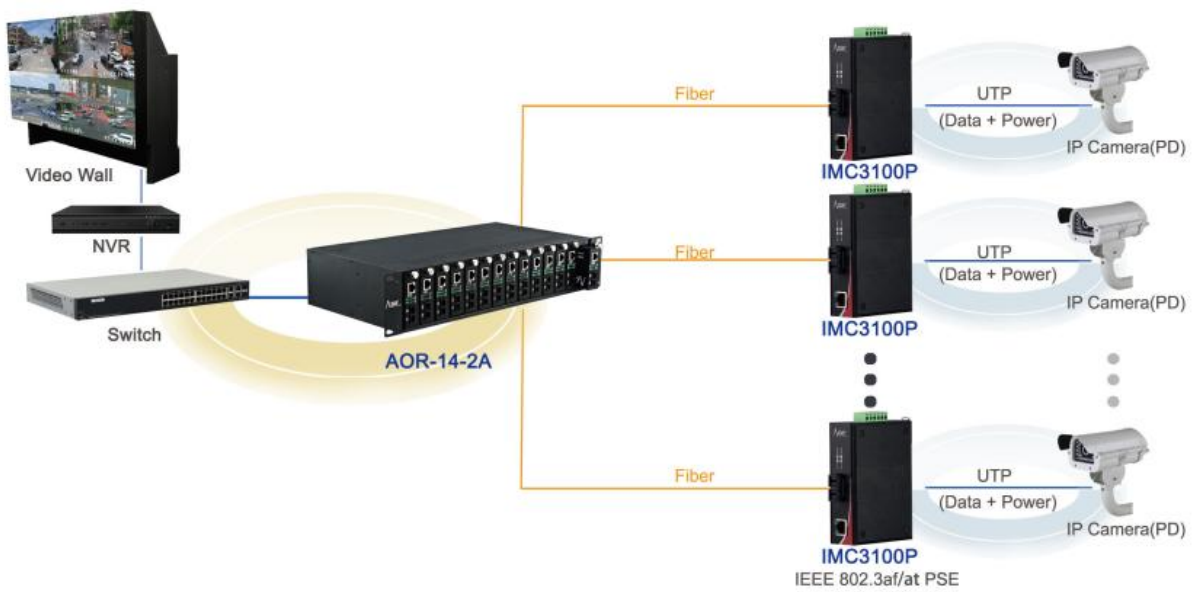
The IMC3100P series enables real-time deterministic network operation, requires no configuration, and will instantly operate as soon as you power it up. Additionally, they can be installed by DIN-rail or wall-mounted, allowing users to deploy any mix of network conversions required.

### Features

- UTP to fiber media converter
- IEEE 802.3af/at compliant
- 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 (48~56VDC)
- 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

## 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 IEEE802.3af/at POE
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 550/2km, 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 POE: ON=Power Working; Off=No Power
Power	Input Voltage: 48~56VDC, redundant power inputs Power Consumption: ≤5W PoE Budget: 15.4W(PoE) 30W(PoE+) 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, Aluminium 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
IMC3100P-SFP	10/100/1000M POE,SFP Slot
IMC3100P-M05	10/100/1000M POE,MMF,850nm,SC,550m
IMC3100P-S20	10/100/1000M POE,SMF,1310nm,SC,20km
IMC3100P-A20	10/100/1000M POE,Bi-di,TX1310/RX1550nm,SC,20km
IMC3100P-B20	10/100/1000M POE,Bi-di,TX1550/RX1310nm,SC,20km
Note: AC/DC power supply purchased separately	

## Related Products

Model	Description
DIN-rail Power supply	
NDR-75-48	DIN-rail 75W, 85~264Vac input, 48Vdc 1.6A 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, $\phi$ 3.5mm L=12mm
A02	Side DIN-rail mounted kits, 72.7*70*8.5mm, $\phi$ 3.5mm L=6mm
CK01	Rack-mounted bracket with Din-rail, 483*215*130mm



TK12 Wall-mounted kits

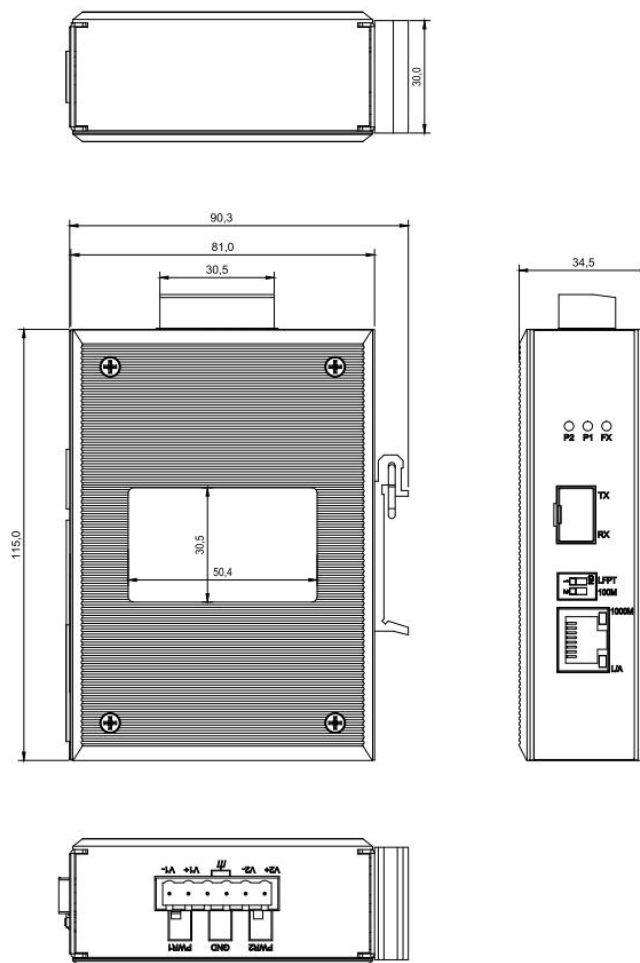


A02 Side DIN rail mounted kits



CK01 Rack-mounted bracket

## Structure diagram (mm)



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