Item	Industrial POE Media Converter
Series No.	IMC3100P
Description	10/100/1000Base-T with POE to 1000Base-FX
	

Overview

The IMC3100P series 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, etc., which are installed 100m far from a Power over Ethernet switch. 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 of any additional power source. All Power over Ethernet Powered Devices (IEEE 802.3af/at complaint) are supported, as the IMC3100P series can deliver a full 15.4W / 30W of power to the remote device.

The IMC3100P series 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 IMC3100P features a 1000Base-FX fiber port and a 10/100/1000Base-T twisted-pair port. The fiber optic port features SC connector and operating distance from 550m to 120km depending on different Model. The twisted-pair port has an RJ-45 connector with a maximum distance of 100m.

IMC3100P-F features a 1000X SFP fiber Port and a 10/100/1000T twisted-pair port. The fiber optic port features a modular SFP slot for any kind of MSA-complaint pluggable 1.25Gbps SFP transceivers.

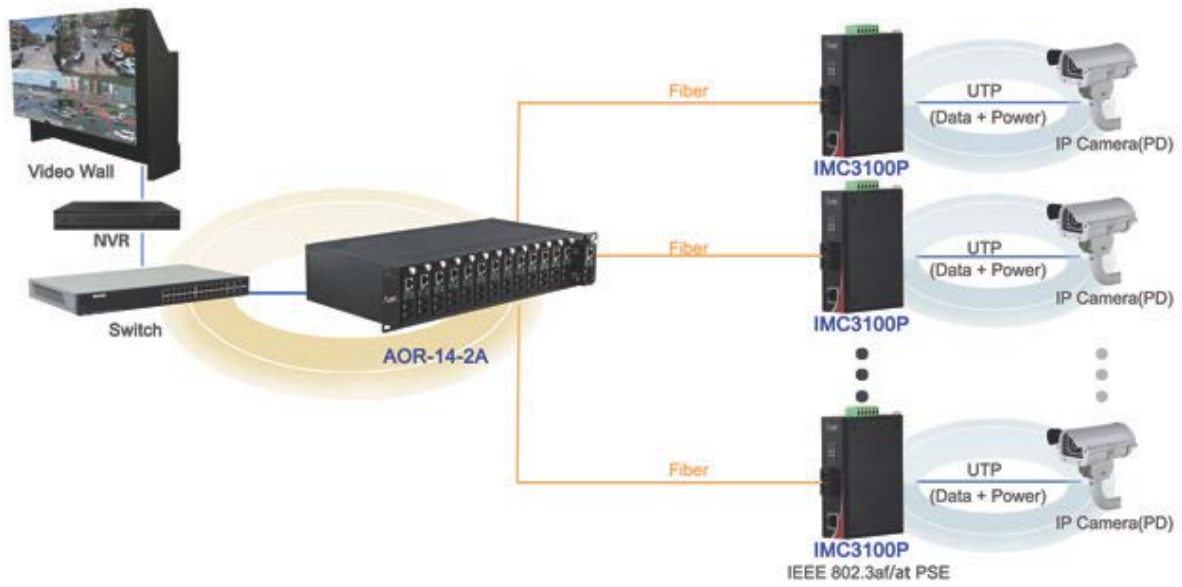
Many Backbone switch products now support the industry-standard IEEE802.1Q specification for VLANs that send extra-long data packets on the network. The IMC3100P series converters are fully compatible with these long packets, enabling them to be used in modern networks

The small size and dual external power supply inputs of the IMC3100P series allows them to be used almost anywhere in harsh environmental conditions. Additionally, they can be installed by DIN-rail or wall-mount, allowing users to deploy any mix of network conversions required.

Features

- UTP to fiber media converter
- IEEE 802.3af/at complaint
- 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- 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, IEEE802.1Q VLANs IEEE 802.3af/at POE
Performance	Conversion Methods : Store and Forward, MAC Address table: 1Kbit Buffer Space: 288Kbit Time Delay: ＜20μs
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 1000M: ON=1000M Data Rate Transmitting POE: ON=Power Working; Off=No Power
Power	Input Voltage: 12~56 VDC, redundant power inputs Protection: Overload Current; Reverse Polarity Power Consumption: <5W (POE excluded) 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 , Wall-Mounted Dimension: 115*81*35mm Weight: 0.30kg

EMS Standards

IEC61000-4-2(ESD): +8KV (Contact Discharge), +15KV (Contact Discharge)
IEC61000-4-3(RS): 10V/M (80-1000MHZ)
IEC61000-4-4(EFT): power cables +4KV, signal cables +2KV
IEC61000-4-5(Surge): power cables +4KV CM/+ 2KV DM, signal cables + 2KV
IEC61000-4-6(RF coupling): 3V (10KHZ-150KHZ),10V (150KHZ-80MHZ)
IEC61000-4-8(Power Frequency Magnetic Field): 100A/M COUNT 1000A/M 1S TO 3S
IEC61000-4-12/18(Damped Oscillatory Wave): 2.5KV CM, 1KV DM
IEC61000-4-10(conducted disturbances): 30A/M
IEC61000-4-16(common mode): 30V COUNT 300V，1S
IEC61000-6-2(Electromagnetic compatibility)
IEC61850-3(electrical substation)
IEEE1613 (electric power substations)
EN50121-4(Rail Traffic)

Order Information

Model No.	Description
IMC3100P-F	10/100/1000M,SFP Slot
IMC3100P-M05	10/100/1000M MMF,850nm,SC,550m
IMC3100P-M02	10/100/1000M MMF,1310nm,SC,2km
IMC3100P-S20	10/100/1000M SMF,1310nm,SC,20km
IMC3100P-S40	10/100/1000M SMF,1310nm,SC,40km
IMC3100P-A20	10/100/1000M Bi-di TX1310/RX1550nm,SC,20km
IMC3100P-B20	10/100/1000M Bi-di TX1550/RX1310nm,SC,20km
IMC3100P-A40	10/100/1000M Bi-di TX1310/RX1550nm,SC,40km
IMC3100P-B40	10/100/1000M Bi-di TX1550/RX1310nm,SC,40km
Note: 1. Power supply provided by user or ordered additionally 2. SC connector as default, FC/ST as request	

IMC3100P-SFP can be suppliesd with any SFP module already inserted:

IMC3100P-SX-MM 10/100/1000TX PoE<>1000 SX (850nm) MM LC
IMC3100P-LH-SM 10/100/1000TX PoE<>1000 LX (1310nm) 10Km SM LC