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| Item | Industrial POE Media Converter |
| Series No. | IMC1100P |
| Description | 10/100Base-TX with POE to 100Base-FX |
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Overview

The IMC1100P 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, 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 IMC1100P series can deliver a full 15.4W / 30W of power to the remote device.

The IMC1100P series 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. It will operate in industrial grade temperature, used in traffic management, oil and gas pipelines, weather tracking, industrial and outdoor applications. Additionally, it can be installed by DIN-rail or wall-mount, allowing users to deploy any mix of network conversions required

The IMC1100P features a 100Base-FX fiber port and a 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 an RJ-45 connector with a maximum operating distance of 100m.

Many Backbone switch products now support the industry-standard IEEE802.1Q specification for VLANs that send extra-long data packets on the network. The IMC1100P series converters are fully compatible with these long packets, enabling them to be used in modern networks.

Features

- UTP with POE to fiber media converter
- IEEE 802.3af/at complaint
- RJ45 support auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Store-and-forward & Cut-thought optional
- Built-in LFP (Link-fault-pass-through) function
- Jumbo frame: 9kbytes
- Wide-range redundant power design (12~56VDC)
- Support wide operating temperature (-40 °C ~ +85 °C)
- 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

Application



Technical Specifications

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| Standards | IEEE802.3 10BaseT; IEEE802.3u 100BaseT(X) IEEE802.3x Flow control; IEEE802.1d Spanning Tree, IEEE802.1Q VLANs; IEEE 802.3af/at POE |
| Performance | Processing Type : Store and Forward, Cut-through MAC Table Size: 1Kbit Buffer Space: 288Kbit Time Delay: <150μs |
| 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 |
| Dip-switch | Dip1 ON + Dip2 ON = Modified Cut-through Mode Dip1 ON + Dip2 Off = Converter Mode Dip1 Off + Dip2 ON = Cut-through Dip1 Off + Dip2 off = Store and forward mode Dip4 ON = LFP Enable; Dip4 Off = LFP Disable |
| 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 Data Rate Transmitting POE: ON=Power Working; Off=No Power |
| Power | Input Voltage: 12~56 VDC, redundant power inputs Power Consumption: <5W (POE excluded) 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 , Wall-Mounted Dimension: 115*81*35mm Weight: 0.30kg |



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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 |
|--------------|---|
| IMC1100P-M02 | 10/100M MMF,1310nm,SC,2km, with POE |
| IMC1100P-S20 | 10/100M SMF,1310nm,SC,20km, with POE |
| IMC1100P-S40 | 10/100M SMF,1310nm,SC,40km, with POE |
| IMC1100P-A20 | 10/100M Bi-di TX1310/RX1550nm,SC,20km, with POE |
| IMC1100P-B20 | 10/100M Bi-di TX1550/RX1310nm,SC,20km, with POE |
| IMC1100P-A40 | 10/100M Bi-di TX1310/RX1550nm,SC,40km, with POE |
| IMC1100P-B40 | 10/100M Bi-di TX1550/RX1310nm,SC,40km, with POE |

Note:

1. Power supply provided by user or ordered additionally
2. SC connector as default, FC/ST as request