

Item	Industrial Media Converter
Series No.	IMC1100
Description	10/100Base-TX to 100Base-FX
	

### 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 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 IMC1100 series converters are fully compatible with these long packets, enabling them to be used in modern networks.

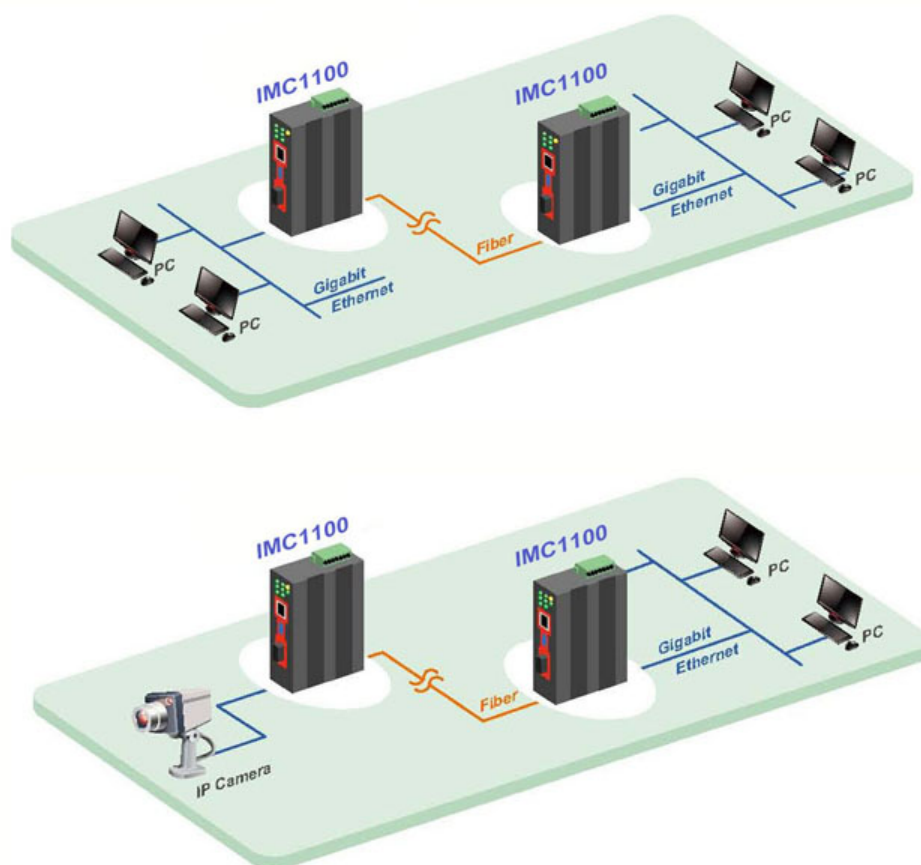
The small size and dual external power supply inputs of the IMC1100 series allows them to be used almost anywhere in harsh environmental conditions; wide range of temperature can be  $-40\text{ }^{\circ}\text{C} \sim +85\text{ }^{\circ}\text{C}$ ; used in traffic management, oil and gas pipelines, weather tracking, industrial and outdoor applications. 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
- 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
- Low power consumption

## Applications



## Technical Specifications

Standards	IEEE802.3 10BaseT, IEEE802.3u 100BaseT(X) IEEE802.3x Flow control and back pressure, IEEE802.1d Spanning Tree, IEEE802.1Q VLANs
Performance	Processing Type : Store and Forward, Cut-through MAC Address table: 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
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 , 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
IMC1100-M02	10/100M MMF,1310nm,SC,2km
IMC1100-S20	10/100M SMF,1310nm,SC,20km
IMC1100-S40	10/100M SMF,1310nm,SC,40km
IMC1100-A20	10/100M Bi-di TX1310/RX1550nm,SC,20km
IMC1100-B20	10/100M Bi-di TX1550/RX1310nm,SC,20km
IMC1100-A40	10/100M Bi-di TX1310/RX1550nm,SC,40km
IMC1100-B40	10/100M 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	