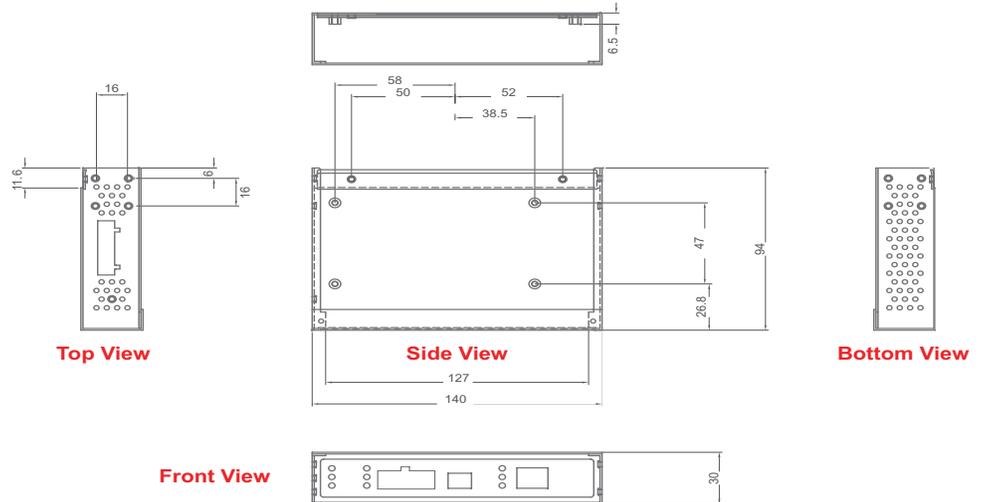


Industrial Media Converter

IMC-100A 10/100BaseTX to 100BaseFX Industrial Media Converter



UTP to Fiber Media Converter ◆ RJ45 Port Supports Auto MDI/MDI-X Function

Description

The IMC-100A is a cost-effective solution for converting between 10/100Base-TX and 100Base-FX cabling. It allows you to extend the cabling distance of your 100Base-FX network up to 2 kilometers for multi-mode fiber or 30 kilometers for single-mode fiber. The Fast Fiber Converter module gives you the option to choose from the most popular fiber cabling connectors: SC multi-mode and single-mode connector.

Fast Fiber Converters Module

The Industrial 10/100Base TX to 100BaseFX Media Converter provides you with one Fiber connector for your fiber optic cable and one Ethernet RJ45 port (Auto MDI/MDIX) for your 100Base-TX copper cable connection. There are four DIP-switches to set the operation mode for UTP, Fiber ports and link loss forwarding function.

Dual Power Input

To reduce the risk of power failure, the Media Converter provides +12 to 48V DC dual power inputs. If there is power failure, the Industrial 10/100BaseTX to 100BaseFX Media Converter will automatically switch to the secondary power input.

Flexible Mounting

The IMC-100A Converter is extremely compact and can be mounted on a DIN-rail or a panel, so it is suitable for any space-constrained environment.

Advanced Protection

The power line of the IMC-100A Media Converter supports up to 3,000V DC EFT protection, which secure equipment against unregulated voltage and make systems safer and more reliable. Meanwhile, 6,000V DC ESD protections for Ethernet ports make the IMC-100A Media Converter more suitable for harsh environments.

Wide Operating Temperature

The operating temperature of the IMC-100A Media Converter is between -40 to 75°C. With such a wide range, you can use the Industrial 10/100Base TX to 100BaseFX Media Converter in some of the harshest industrial environments that exist.

Easy Troubleshooting

LED indicators make troubleshooting quick and easy. The 10/100 Base-TX port has 2 LEDs that display the link status, transmission speed and collision status. Also the three power indicators P1, P2 and Fault help you diagnose immediately.

- UTP to Fiber Media Converter
- RJ45 Port Supports Auto MDI/MDI-X Function
- Auto Negotiation Speed, Half/Full Duplex
- Store-and-Forward Switching Architecture
- Built-in Link Loss Forwarding (LLF) & Link-Fault-Pass-Through (LFP)
- Wide-range Redundant Power Design
- Power Polarity Reverse Protection
- Overload Current Protection
- DIN-Rail or Wall Mountable
- UL Class I, Division 2 Certified
- IP30 Protection
- 5-Year Warranty

Key Features & Benefits



Industrial Media Converter

IMC-100A 10/100BaseTX to 100BaseFX Industrial Media Converter



Performance Specifications

Technology

Standards

IEEE 802.3 10BaseT Ethernet
IEEE 802.3u 100BaseTX/100BaseFX
IEEE 802.3x Flow Control and Back-Pressure

Connector

Fiber: SC/ST (Multi-Mode), SC/ST (Single-Mode, 30Km)
RJ45 Socket: CAT-3/5 (10/100Mbps) Twisted Pair Cable
Auto MDI/MDI-X & Auto-Negotiation Function Support

Switch Characteristics

Switch Architecture
Store and Forward

Fiber Parameters

Fiber Core: Multi-Mode (62.5/125um ~ 50/125um)
Single-Mode (9/125um ~ 10/125um)
Wavelength: 1310nm
Fiber Distance: Multi-Mode Fiber 2Km
Single-Mode Fiber 30Km

Link Loss Forward

TX → Fiber:

If TX port link down, will force Fiber port to link down

Fiber → TX:

If Fiber port link down, will force TX port to link down

DIP Switch

DIP 1: ON = Enables Port/Power Alarm
OFF = Disables Port/Power Alarm
DIP 2: ON = Enables Link Loss Forward &
Link-Fault-Pass-Through
OFF = Disables Link Loss Forward &
Link-Fault-Pass-Through
DIP 3: ON = 100BaseFX Half-Mode
OFF = 100BaseFX Full-Mode
DIP 4: ON = 100BaseTX Full-Duplex Mode
OFF = Auto-Negotiation

LED

Unit: Power, Power 1, Power 2 (Green), Fault (Red)
TX: Link/Act (Green), 100M (Yellow)
Fiber: Link/Act (Green), Full Duplex/Collision (Yellow)

Power

Power
DC 12 to 48V
Redundant power with reverse polarity protection and
removable terminal block

Power Consumption

2.74 Watts
Reserve Polarity/Overload Current Protection
Present

Mechanical

Casing
IP30 Metal Case
Dimensions
30 x 140 x 95 mm (W*H*D):
(1.18 x 5.51 x 3.74 inches)
Installation
DIN-Rail/Wall Mountable

Environmental

Operation Temperature
-40° to 80°C (-40° F to 176° F)
Operation Humidity
5% to 95% (Non-Condensing)

Storage Temperature

-40° to 85°C

Regulatory

EMI
FCC Class A
CE EN6100-4-2/EN6100-4-3/EN6100-4-4/EN6100-4-5/
EN6100-4-6/EN6100-4-8/EN6100-4-11/
EN6100-4-12/EN6100-6-2/EN6100-6-4

Safety

UL/cUL Class I, Division 2
CE EN60950-1

Shock

IEC60068-2-27

Free Fall

IEC60068-2-32

Vibration

IEC60068-2-6

Ordering Information

Models

IMC-100A-M-T
10/100TX To 100FX Harden Media Converter,
Multi-Mode 2KM, -40 to 80°C

IMC-100A-S3-T

10/100TX To 100FX Harden Media Converter,
Single Mode 30KM, -40 to 80°C

Related Products

Ethernet I/O Modules

www.acromag.com/ethernetio

Power Supplies

www.acromag.com/powersupplies

Mounting Accessories

www.acromag.com/mounting

ISO9001
AS9100



Acromag 
THE LEADER IN INDUSTRIAL I/O

Tel 248-295-0880 ■ Fax 248-624-9234 ■ sales@acromag.com ■ www.acromag.com ■ 30765 Wixom Rd, Wixom, MI 48393 USA