

# IMC-100A-XX Series

10/100TX to 100FX Industrial Media Converter



## Features

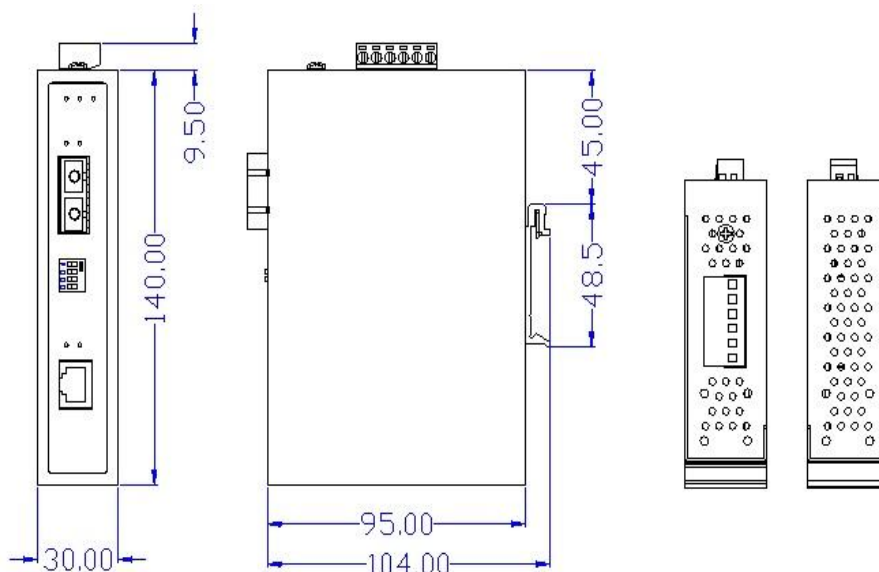
- ▶ UTP to Fiber Media Converter
- ▶ Store-and-Forward Switching Architecture
- ▶ RJ45 Port Support Auto MDI/MDI-X Function
- ▶ Auto Negotiation Speed, Half/Full Duplex
- ▶ Reverse Polarity Power Protection
- ▶ Redundant Power Input Design: 12~36VDC
- ▶ Built-in 1 Relay Output for Power Failure Warning
- ▶ IP30 Rugged Metal Case Design
- ▶ DIN-Rail and Wall Mount Support Included
- ▶ Operating Temperature Range: STD: -10° to 70°C, EOT: -40° to 80°C
- ▶ UL Class 1, Division 2 Certified
- ▶ 5-Year Warranty

## INTRODUCTION

**Antaira Technologies' IMC-100A series** is an industrial grade unmanaged Ethernet media converter featuring a simple plug-and-play operation to quickly convert between Ethernet and fiber optics. The IMC-100A series supports fast Ethernet speeds of 100Mbps, featuring 1\*10/100Tx Ethernet port and 1\*100Fx fiber port. This unit is an ideal solution for applications looking to convert between an RJ45 Ethernet connection and a fiber connection.

IMC-100A series is IP30 rated and DIN-rail mountable. This product series supports a low voltage power input range of 12~48VDC. Also, there are two operating temperature models for either a standard temperature range (STD: -10°C to 70°C) or an extended temperature range (EOT: -40°C to 80°C). It also provides Ethernet and fiber optic connectivity for outdoor or harsh industrial environment applications, such as, security surveillance, ITS-traffic monitoring systems, oil/gas and mining, facility management for power/utility, water wastewater treatment plants, and lastly, automated production lines in factory automation.

## DIMENSIONS



## SPECIFICATIONS

| Technology                         |                                                                                                              | Mechanical Characteristics       |                                            |
|------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------|
| <b>Standards</b>                   | IEEE 802.3 10BaseT Ethernet<br>IEEE 802.3u 100BaseTX/100BaseFX<br>IEEE 802.3x Flow Control and Back-Pressure | <b>Housing</b>                   | Metal, IP30 rated                          |
| <b>Processing Type</b>             | Store-and-Forward                                                                                            | <b>Dimensions</b>                | 30 x 140 x 95 mm                           |
| <b>Protocol</b>                    | CSMA/CD                                                                                                      | <b>Weight</b>                    | Unit: 0.95 lbs<br>Shipping: 1.4 lbs        |
| <b>Flow Control</b>                | IEEE 802.3x back pressure flow control                                                                       | <b>Mounting</b>                  | DIN-Rail, Wall-Mount (optional)            |
| Switch Properties                  |                                                                                                              | Environmental Limits             |                                            |
| <b>Switch Architecture</b>         | Back-Plane (Switching Fabric): 10.0Gbps                                                                      | <b>Operating Temperature</b>     | STD: -10° to 70°C<br>EOT: -40° to 80°C     |
| <b>Transfer Rate</b>               | 14,880pps for 10Base-T Ethernet<br>148,800pps for 100Base-T Fast Ethernet                                    | <b>Storage Temperature</b>       | -40°~85°C                                  |
| Interface                          |                                                                                                              | <b>Ambient Relative Humidity</b> | 5 to 95%, (Non-condensing)                 |
| <b>Ethernet Port</b>               | 1*10/100Tx auto negotiation speed, Full/Half duplex mode, and auto MDI connection                            | Regulatory Approvals             |                                            |
| <b>Fiber Parameters</b>            | Fiber Core: Multi-Mode (62.5/125um ~ 50/125um)                                                               | <b>EMI</b>                       | FCC Class A                                |
|                                    | Single-Mode (9/125um ~ 10/125um)                                                                             | <b>EMS</b>                       | EN6100-4-2,3,4,5,6,8,11,12<br>EN6100-6-2,4 |
|                                    | Wavelength: 1310nm                                                                                           | <b>Free Fall</b>                 | IEC60068-2-32                              |
|                                    | Fiber Distance: Multi-Mode Fiber 2Km<br>Single-Mode Fiber 30Km                                               | <b>Shock</b>                     | IEC60068-2-27                              |
|                                    | WDM: Mode A Tx1310nm Rx1550nm<br>WDM: Mode B Tx1550nm Rx1310nm                                               | <b>Vibration</b>                 | IEC60068-2-6                               |
| <b>Network Cable</b>               | 10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable;                                                                 | <b>Certifications</b>            | FCC, CE, UL Class 1 Division 2             |
|                                    | 100Base-TX: 2-pair UTP/STP Cat. 5 cable.                                                                     | <b>Warranty</b>                  | 5 Years                                    |
|                                    | EIA/TIA-568 100-ohm (100m)<br>1000BaseTX: UTP/STP Cat.5/5E cable;<br>EIA/TIA-568 100-ohm (100m)              |                                  |                                            |
| Power Requirement                  |                                                                                                              |                                  |                                            |
| <b>Input Voltage</b>               | 12~48VDC Redundant Input                                                                                     |                                  |                                            |
| <b>Power Connection</b>            | 1 removable 6-contact terminal block                                                                         |                                  |                                            |
| <b>Reverse Polarity Protection</b> | Present                                                                                                      |                                  |                                            |
| <b>Overload Current Protection</b> | Present                                                                                                      |                                  |                                            |
| <b>Power Consumption</b>           | 2.74 Watts                                                                                                   |                                  |                                            |

## ORDERING INFO

| <b>IMC-100A-M</b>       | 10/100TX to 10/100FX Industrial Media Converter, Multi-Mode 2km, SC Connector                                |
|-------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>IMC-100A-M-T</b>     | 10/100TX to 10/100FX Industrial Media Converter, Multi-Mode 2km, SC Connector, EOT: -40°~80°C                |
| <b>IMC-100A-S3</b>      | 10/100TX to 10/100FX Industrial Media Converter, Single Mode 30km, SC Connector                              |
| <b>IMC-100A-S3-T</b>    | 10/100TX to 10/100FX Industrial Media Converter, Single Mode 30km, SC Connector, EOT: -40°~80°C              |
| <b>IMC-100A-ST-M</b>    | 10/100TX to 10/100FX Industrial Media Converter, Multi-Mode 2km, ST Connector                                |
| <b>IMC-100A-ST-M-T</b>  | 10/100TX to 10/100FX Industrial Media Converter, Multi-Mode 2km, ST Connector, EOT: -40°~80°C                |
| <b>IMC-100A-ST-S3</b>   | 10/100TX to 10/100FX Industrial Media Converter, Single Mode 30km                                            |
| <b>IMC-100A-ST-S3-T</b> | 10/100TX to 10/100FX Industrial Media Converter, Single Mode 30km, EOT: -40°~80°C                            |
| <b>IMC-100A-WA-S2</b>   | 10/100TX to 10/100FX Industrial Media Converter, Single Fiber (WDM-A), Single Mode 20km, TX1310nm - RX1550nm |
| <b>IMC-100A-WB-S2</b>   | 10/100TX to 10/100FX Industrial Media Converter, Single Fiber (WDM-B), Single Mode 20km, TX1550nm - RX1310nm |
| Optional Accessories    |                                                                                                              |
| <b>DR-45-24</b>         | 45 Watt Series Industrial Single Output DIN-Rail Power Supply - 24 VDC / 2.0 Amps                            |
| <b>DR-75-24</b>         | 75 Watt Industrial Single Output DIN-Rail Power Supply - 24 VDC / 3.2 Amps                                   |
| <b>DR-120-24</b>        | 120 Watt Industrial Single Output DIN-Rail Power Supply - 24 VDC / 5.0 Amps                                  |

## Assured Systems

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