ASSURED SYSTEMS

antaira®

IMC-100A-XX Series

10/100TX to 100FX Industrial Media Converter
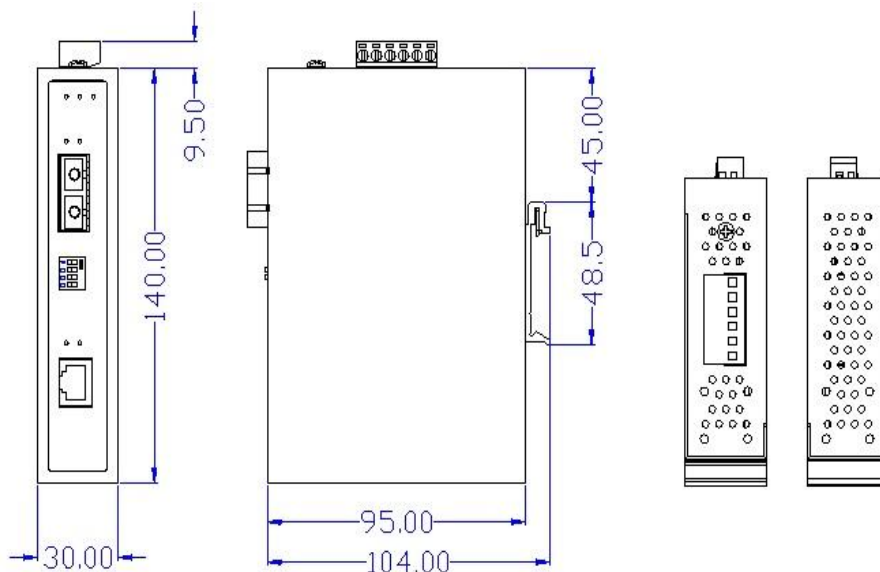
Features

▶ 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

antaira

SPECIFICATIONS

Technology

Standards	IEEE 802.3 10BaseT Ethernet IEEE 802.3u 100BaseTX/100BaseFX IEEE 802.3x Flow Control and Back-Pressure
Processing Type	Store-and-Forward
Protocol	CSMA/CD
Flow Control	IEEE 802.3x back pressure flow control

Switch Properties

Switch Architecture	Back-Plane (Switching Fabric): 10.0Gbps
Transfer Rate	14,880pps for 10Base-T Ethernet 148,800pps for 100Base-T Fast Ethernet

Interface

Ethernet Port	1*10/100Tx auto negotiation speed, Full/Half duplex mode, and auto MDI connection
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 WDM: Mode A Tx1310nm Rx1550nm WDM: Mode B Tx1550nm Rx1310nm
Network Cable	10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable; 100Base-TX: 2-pair UTP/STP Cat. 5 cable. EIA/TIA-568 100-ohm (100m) 1000BaseTX: UTP/STP Cat.5/5E cable; EIA/TIA-568 100-ohm (100m)

Power Requirement

Input Voltage	12~48VDC Redundant Input
Power Connection	1 removable 6-contact terminal block
Reverse Polarity Protection	Present
Overload Current Protection	Present
Power Consumption	2.74 Watts

Mechanical Characteristics

Housing	Metal, IP30 rated
Dimensions	30 x 140 x 95 mm
Weight	Unit: 0.95 lbs Shipping: 1.4 lbs
Mounting	DIN-Rail, Wall-Mount (optional)

Environmental Limits

Operating Temperature	STD: -10° to 70°C EOT: -40° to 80°C
Storage Temperature	-40°~85°C
Ambient Relative Humidity	5 to 95%, (Non-condensing)

Regulatory Approvals

EMI	FCC Class A
EMS	EN6100-4-2,3,4,5,6,8,11,12 EN6100-6-2,4
Free Fall	IEC60068-2-32
Shock	IEC60068-2-27
Vibration	IEC60068-2-6
Certifications	FCC, CE, UL Class 1 Division 2
Warranty	5 Years

ORDERING INFO

IMC-100A-M	10/100TX to 10/100FX Industrial Media Converter, Multi-Mode 2km, SC Connector
IMC-100A-M-T	10/100TX to 10/100FX Industrial Media Converter, Multi-Mode 2km, SC Connector, EOT: -40°~80°C
IMC-100A-S3	10/100TX to 10/100FX Industrial Media Converter, Single Mode 30km, SC Connector
IMC-100A-S3-T	10/100TX to 10/100FX Industrial Media Converter, Single Mode 30km, SC Connector, EOT: -40°~80°C
IMC-100A-ST-M	10/100TX to 10/100FX Industrial Media Converter, Multi-Mode 2km, ST Connector
IMC-100A-ST-M-T	10/100TX to 10/100FX Industrial Media Converter, Multi-Mode 2km, ST Connector, EOT: -40°~80°C
IMC-100A-ST-S3	10/100TX to 10/100FX Industrial Media Converter, Single Mode 30km
IMC-100A-ST-S3-T	10/100TX to 10/100FX Industrial Media Converter, Single Mode 30km, EOT: -40°~80°C
IMC-100A-WA-S2	10/100TX to 10/100FX Industrial Media Converter, Single Fiber (WDM-A), Single Mode 20km, TX1310nm - RX1550nm
IMC-100A-WB-S2	10/100TX to 10/100FX Industrial Media Converter, Single Fiber (WDM-B), Single Mode 20km, TX1550nm - RX1310nm

Optional Accessories

DR-45-24	45 Watt Series Industrial Single Output DIN-Rail Power Supply - 24 VDC / 2.0 Amps
DR-75-24	75 Watt Industrial Single Output DIN-Rail Power Supply - 24 VDC / 3.2 Amps
DR-120-24	120 Watt Industrial Single Output DIN-Rail Power Supply - 24 VDC / 5.0 Amps

Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

US

sales@assured-systems.com

Sales: +1 347 719 4508
Support: +1 347 719 4508

1309 Coffeen Ave
Ste 1200
Sheridan
WY 82801
USA

EMEA

sales@assured-systems.com

Sales: +44 (0)1785 879 050
Support: +44 (0)1785 879 050

Unit A5 Douglas Park
Stone Business Park
Stone
ST15 0YJ
United Kingdom

VAT Number: 120 9546 28
Business Registration Number: 07699660