**Allied Telesis™**

# IMC100 Series

## FAST ETHERNET INDUSTRIAL MEDIA CONVERTERS

### AT-IMC100T/SCMM
2-port Fast Ethernet industrial media converter, 10/100TX to 100FX (SC) 2 km, MMF

### AT-IMC100T/SCSM
2-port Fast Ethernet industrial media converter, 10/100TX to 100FX (SC) 30 km, SMF

### Extend Networks
The Allied Telesis IMC100 Series is designed to extend the distance of your network by converting Fast Ethernet data between twisted pair cabling and MultiMode or SingleMode fiber-optic cabling. The IMC100 features a 100FX fiber port and a 10/100TX twisted-pair port. The fiber optic port features a dual SC connector and operating distance of 2 km (6,561 ft) to 30 km (9.14 mi) depending on the model. The twisted pair port has an RJ-45 connector with a maximum operating distance of 100 meters (328 feet).

### VLAN Support
Many new backbone switch products now support the industry-standard IEEE 802.1Q specification for Virtual LANs (VLANs) that send extra-long data packets on the network. The IMC100 switches are fully compatible with these long packets, enabling them to be used in modern networks. Switches not supporting this feature will discard these extra-long packets, making them unsuitable for modern networks.

### Small and Flexible
The small size and dual external power supply inputs of the IMC100 series allows them to be used almost anywhere in harsh environmental condition. Additionally, they can be mounted both on DIN rail (EN50022) or by wallmount, allowing users to deploy any mix of network conversions required.

## Key Features

» UTP to Fiber Media Converter
» RJ-45 port support 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) Technology
» RoHS compliant
» Store and Forward Switch Architecture
» Support wide operating temperature (-40°C–75°C)
» Wide-range redundant power design
» Power polarity reverse protect
» Overload current resettable fuse present
» IP-30 protection
» DIN rail (EN50022) and wallmount design
» Provides EFT protection 3000 vDC for power line
» Supports 6000 vDC Ethernet ESD protection

| MODEL | PORT TYPE | CONNECTOR | DISTANCE | WAVELENGTH |
|---|---|---|---|---|
| AT-IMC100T/SCMM | Multi-mode (62.5/125um, 50/125um) | SC | 2km | 1310nm |
| AT-IMC100T/SCSM | Single-mode (9/125um) | SC | 30km | 1310nm |

the **solution** : the **network**

# IMC100 Series | Fast Ethernet Industrial Media Converters

## Specifications

### Connector
Fiber: Duplex SC
RJ-45: CAT-5 (10/100TX) Twisted Pair cable
Auto MDI/MDI-X
Auto-Negotiation

### Status LEDs
| | |
|---|---|
| Power 1 | Active/Inactive |
| Power 2 | Active/Inactive |
| Fault | Fault/Functional |
| FDX/COL (Fiber) | Full-duplex/Half-duplex/Collision |
| LINK/ACT (Fiber) | Connected/Not connected/Active |
| 100M (RJ-45) | 100M/10M |
| LINK/ACT (RJ-45) | Connected/Not connected/Active |

### DIP Switch
| | |
|---|---|
| 1 | Port/power alarm |
| 2 | Link Lose Forwarding |
| 3 | Half/full mode |
| 4 | Media/switching mode |

### Link Lose Forward
| | |
|---|---|
| TX to Fiber | If TX port link down, the media converter will force Fiber port to link down |
| Fiber to TX | If Fiber port link down, the media converter will force TX port to link down |

### Standards and Compliance
| | |
|---|---|
| IEEE802.3 | 10BASE-T |
| IEEE802.3u | 100BASE-TX/100BASE-FX |
| IEEE802.3x | Flow control and back pressure |

### Power Characteristics
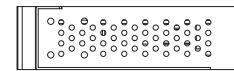| | |
|---|---|
| External power supply | 12~48 vDC |
| Power consumption | 3.36 Watts |

### Environmental Specifications
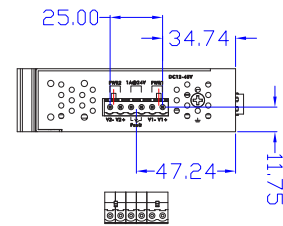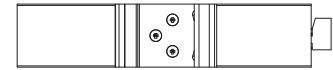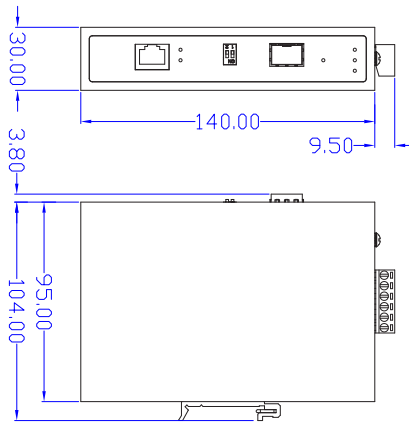| | |
|---|---|
| Operating temperature | -40°C to 75°C (-40°F to 167°F) |
| Operating humidity | 5% to 90% relative humidity (non-condensing) |
| Storage temperature | -40°C to 85°C (-40°F to 185°F) |
| Altitude | 0 m to 2000 m (operational) |

### Physical Specifications
| | |
|---|---|
| Dimensions | 3 cm x 9.5 cm x 14 cm |
| (W x D x H) | 1.18 in x 3.74 in x 5.51 in |
| Weight | 0.7 kg (1.45 lbs) |
| Case Material | Metal, IP-30 |

### Installation
DIN rail (EN50022) or wallmount

### Electrical and Mechanical Approvals
| | |
|---|---|
| EMI | FCC Class A |
| | CE EN61000-3-2 |
| | CE EN61000-3-3 |
| | CE EN61000-4-2 (ESD) |
| | CE EN61000-4-3 (RS) |
| | CE EN61000-4-4 (EFT) |
| | CE EN61000-4-5 (Surge) |
| | CE EN61000-4-6 (CS) |
| | CE EN61000-4-8 |
| | EN61000-4-11 |
| | EN61000-4-12 |
| | CE EN61000-6-2 |
| | CE EN61000-6-4 |
| | C-TICK |
| Safety | UL 508 |
| | cUL |
| | CE EN60950-1 (LVD) |
| | Class I, Division 2, Groups A, B, C, Hazardous Locations |
| Stability | IEC60068-2-32 (Free fall) |
| | IEC60068-2-27 (Shock) |
| | IEC60068-2-6 (Vibration) |

## Ordering Information

**AT-IMC100T/SCMM-80**
10/100TX to 100FX (SC), 2 km, MMF, industrial temperature

**AT-IMC100T/SCSM-80**
10/100TX to 100FX (SC), 30 km, SMF, industrial temperature