AT-IMC1000T-SFP

2-PORT GIGABIT ETHERNET INDUSTRIAL MEDIA CONVERTER

Allied Telesis Industrial Ethernet Media Converters (IMCs) offer an operating range from -40°C to 75°C. The temperature-hardened IMC Series features Plug and Play and auto-negotiation.

Extend Networks

The AT-IMC1000T/SFP is designed to extend the distance of a network by converting any Ethernet data between twisted-pair cabling to multi-mode or single-mode fiber-optic cabling Gigabit Ethernet (IEEE 802.3z). The AT-IMC1000T/SFP operates at industrial temperature (-40°C to 75°C) and features a 1000X SFP fiber port and a 10/100/1000T twisted-pair port. The fiber-optic port features a modular SFP bay for any kind of MSA-compliant pluggable SFP model working at 1Gbps. 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 IMC1000 Series 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 IMC1000 Series allows them to be used almost anywhere in harsh environmental conditions. Additionally, they can be installed both on DIN rail (EN50022) or by wall-mount, allowing users to deploy any mix of required network conversions.

Key Features

- UTP to fiber media converter
- RJ-45 port supports auto MDI/MDI-X function
- Auto-negotiation speed, half/full-duplex
- Store-and-Forward switching architecture
- Built-in Link Loss Forwarding (LLF) and Link Fault Pass-Through (LFP) technology
- RoHS compliant
- Jumbo frame: 9Kbytes
- Supports 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 wall-mount design
- Provides EFT protection 3000 vDC for power line
- Supports 6000 vDC Ethernet ESD protection

Specifications

Connector

Fiber	1 x SFP slot, supports only 1000Mbps
RJ-45	CAT-5 or over (10/100/1000T) twisted pair Auto MDI/MDI-X Auto-negotiation

Status LEDs

Power 1	Active/Inactive
Power 2	Active/Inactive
Fault	Fault/Functional
LINK/ACT (fiber)	Connected/Not connected/Active
1000M (RJ-45)	1000M / 10/100M
LINK/ACT (RJ-45)	Connected/Not connected/Active

DIP Switch

1	Enable/disable power alarm
2	Link Lose Forwarding

Link Loss 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

IEEE 802.3	10T
IEEE 802.3u	100TX
IEEE 802.3ab	1000T
IEEE 802.3x	Flow Control and back pressure
IEEE 802.3z	1000SX/LX standards

Power Characteristics

External power supply	12~48 vDC
Power consumption	5.28 Watts

Environmental Specifications

Operating temperature	-40°C to 75°C (-40°F to 167°F)
Operating humidity	5% to 95% 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 (W x D x H)	3 cm x 9.5 cm x 14 cm 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 wall-mount

Electrical and Mechanical Approvals

EMI	FCC Class A 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 CE EN61000-6-2 CE EN61000-6-4 C-TICK
Safety	UL60950 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-IMC1000T/SFP-80
10/100/1000T to 1000X SFP, industrial temperature

Supported SFP Modules

AT-SPSX
AT-SPLX10
AT-SPSX/I
AT-SPLX10/I
AT-SPBD10-13
AT-SPBD10-14

617-000497 Rev D