Allied Telesis™

AT-MC104XL
Fast Ethernet Media Converters

AT-MC104XL
Fiber SC multi-mode to fiber SC single-mode media converters

Fiber Connections
The Allied Telesis range of Fast Ethernet media converters provide a complete family of conversion devices, allowing users to extend the size of UTP and multi-mode fiber networks with the use of single-mode fiber cabling. Supporting SC connected single-mode fiber, these converters can be used to extend networks up to a distance of 40km.

Auto-negotiation and MissingLink™
When connecting media converters to auto-negotiating Fast Ethernet switches, these media converters will automatically connect the link in either full or half-duplex mode, allowing the link to be established with the greatest bandwidth. Alternatively, the MissingLink feature allows accurate reporting to network management systems as well as allowing devices with redundant link capability to be inter-connected with these media converters, as a failure in one fiber link will be signalled to the switch, allowing the second link to become active.

Simple Installation
The media converters allow the installer to test the integrity of fiber connection, by forcing the converters to communicate over the fiber cable. This Link Test feature allows installers to check for cable faults without the need for expensive fiber-optic test equipment.

Standalone or Rack-mount
Each small media converter is powered by an external power supply unit for use in standalone applications. Where multiple media converters are being used, up to 12 standalone devices can be inserted into a low-cost rack-mount chassis, allowing all the converters to be powered by a single internal power supply. In critical applications, a second load sharing internal power supply can be installed into the rack-mount chassis.

Hassle Free Support
Allied Telesis Fast Ethernet media converters offer free technical support, ensuring trouble-free installation.

Key Features

- EnergyStar power adapters save customers a minimum of 20% power consumption*

- Half and full-duplex operation

- Transparent to IEEE 802.1Q packets

- Rack-mountable using optional AT-MCR12, AT-TRAY4 or AT-TRAY1 chassis

- Wall-mountable using AT-WLMT

- MissingLink

- Link test

- RoHS compliant

2002/95/EC
RoHS COMPLIANT
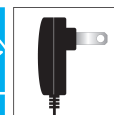
Powered by an ENERGY STAR® qualified adapter for a better environment

ENERGY STAR

* Compared to previous models

Port Type (Connector)	Cable Distance	Optical Frequency	Launch Power (dBm)			Receive Power (dBm)		
			Max.	Avg.	Min.	Min. Sensitivity	Typical Sensitivity	Saturation
100FX MMF (2km)	2km	1310nm	-14.0	-16.8	-19.0	-31.8	-34.5	-14.0
100FX SMF (15km)	15km	1310nm	-8.0	-11.5	-15.0	-31.0	-31.0	-8.0
100FX SMF (40km)	40km	1310nm	0.0	-3.0	-5.0	-35.0	-38.0	0.0

Link Test

The link test is a fast and easy way for you to test the connections between the media converter ports and the end-nodes that are connected to the ports. If a network problem occurs, you can perform a link test to determine which port is experiencing a problem, and be able to focus your troubleshooting efforts on the cable or end-node where the problem resides.

MissingLink

The MissingLink feature enables the two ports on the media converter to pass the 'Link' status of their connections to each other. When the media converter detects a loss of connection to an end-node, the media converter shuts down the connection to the other port, thus notifying the end-node that the connection has been lost.

Technical Specifications

Status Indicators

Front Panel

Power	Indicates power is applied to the converter
Link (2)	Indicates a valid receive link exists
Activity (2)	Indicates TX/RX on the port
ML	Indicates MissingLink enabled

Switches

ML	Indicates MissingLink enabled

Packet Transmission Characteristics

Round trip delay	0.4μs maximum
Bit Error Rate (BER)	<10-12

Power Characteristics

External power supply	120V AC, 60Hz (US model)
	240V AC, 50Hz (European models)
Input supply voltage	12vDC
Max current	500mA
Power consumption	6W

Environmental Specifications

Operating temp.	0°C to 40°C (32°F to 104°F)
Storage temp.	−20°C to 80°C
Relative humidity	5% to 95% non-condensing
Operating altitude	0 to 10,000 feet
RoHS compliant	

Physical Characteristics

Dimensions (W x D x H)	10.5cm x 9.5cm x 2.5cm (4.12" x 3.75" x 1.0")
Weight	294g (10.4oz)

Electrical/Mechanical Approvals

EMC	FCC Class A
Safety compliant	UL-Cul, CSA/CSA, NRTL, TUV, CE compliant

Ordering Information

AT-MC104XL-xx
Multi-mode fiber to single-mode SC (15km) fiber

Where xx = 10 AC power supply, US power cord
20 AC power supply, European power cord
30 AC power supply, UK power cord
40 AC power supply, Australian power cord

Associated Products

AT-TRAY1
Rack-mounting tray for one media converter

AT-TRAY4
Rack-mounting tray for up to four media converters

AT-WLMT
Wall-mount bracket for one media converter

AT-MCR12
12 slot AC/DC powered chassis for media converters

Connecting The (IP) World

Allied Telesis