Allied Telesis



MC100x Series

Pluggable Media Converters

AT-MC1004
1000T to 1000SX media converter

AT-MC1008/GB
1000T, GBIC pluggable media converter

AT-MC1008/SP
1000T, SFP pluggable media converter

Overview

The MC100x series Ethernet media converters are designed to extend the distance of your network by interconnecting LAN devices that are physically separated by large distances. These media converters have the functionality to connect any managed/unmanaged 1000Mbps (1Gbps) switch or hub using standard 1000T RJ-45 connections and convert the signal to 1000Base optical via a GBIC or SFP or fixed 1000SX port. The pluggable optics feature allows for flexible network configurations of reach whilst reducing the number of products for sparing and inventory.

Extend the Distance of Ethernet

Each AT-MC1008 media converter features a 1000T twisted pair port and a GBIC or SFP port. The twisted pair port has an RJ-45 connector and a maximum operating distance of 100 meters (328 feet).

For the AT-MC1008/GB, the fiber optic port has a GBIC slot and a maximum operating distance dependent on the GBIC.

For the AT-MC1008/SP, the fiber optic port has an SFP slot and a maximum operating distance dependent on the SFP.

For the AT-MC1004, the fiber optic port has a fixed multi-mode fiber 1000SX (SC) connector and a maximum operating distance of 550m.

Cost-effective Migration

Although the provisioning of Gigabit Ethernet connections is becoming relatively inexpensive, thanks in part to the availability of lower-cost copper Gigabit network adapters, the distance limitations of copper cabling make fiber segments a necessity in most networks. Small, comparatively inexpensive copper to fiber Gigabit Ethernet media converters present a simple and very cost-effective way of connecting Gigabit Ethernet LANs over extended distances.

Standalone or Rack-mounted

Each small media converter is powered by an external power supply unit for use in standalone applications. Where multiple media converters are used, up to 12 standalone devices can be inserted into a low-cost AT-MCR12 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

All Allied Telesis Ethernet media converters offer free technical support, ensuring trouble-free installation.

Key Features

- EnergyStar power adapters save customers a minimum of 20% power consumption*
- System and port LEDs
- Auto-sense MDI/MDI-X
- Full-duplex operation
- Cost effective migration from Gigabit copper to Gigabit fiber
- MissingLink™ and Smart MissingLink™ troubleshooting features
- External AC power adapter
- Standalone, wall or rack-mountable into the AT-MCR12 chassis
- MC1008 series supports all Allied Telesis Gigabit fiber GBIC and SFP for distances up to 80km
- Jumbo frames up to 10K

energy ENERGY STAR

* Compared to previous models

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 so 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.

Smart MissingLink

The Smart MissingLink feature performs exactly the same function as MissingLink with one additional feature. When a link is lost on a port, the LINK LED of the port which still has a valid connection to its end-node starts to blink. This allows you to quickly determine which port still has a valid connection (LINK LED blinking) and which port has lost its connection (LINK LED off).

Technical Specifications

System LEDs

PWR	Green	Indicates that the converter power is ON
	OFF	Indicates that the converter has no power signal

Fiber Optic Port LEDs

(GBIC or SFP Expansion Slot)

LNK	Solid Green	Indicates a valid link has been established between the port and the end-node
	OFF	Indicates that there is no link between the port and the end-node
ACT	Flashing Green	Indicates that the port is transmitting and/or receiving data packets
	OFF	Indicates that there is no activity on the port

Mode Push Button LEDs

ML	Green	MissingLink mode is enabled
	OFF	MissingLink mode is disabled
SML	Green	Smart MissingLink mode is enabled
	OFF	Smart MissingLink mode is disabled
LT	Green	Link Test mode is enabled
	OFF	Link Test mode is disabled

Physical Characteristics

Dimensions: (W x D x H)	10.5cm x 9.5cm x 2.5cm (4.125in x 3.75in x 1.0in)
Weight:	0.27 kg (0.60 lbs)

Power Characteristics

External power supply	100-120/220-240V AC, 50/60Hz +/-3%
Input supply voltage	12vDC +/-5%
Max current	0.5A
Power consumption	6W

Environmental Specifications

Max operating temp:	0°C to 40°C (32°F to 104°F)
Max storage temp:	-25°C to 70°C (-13°F to 158°F)
Operating and storage altitude:	Up to 3,048 meters (10,000 feet)
Relative humidity Operating and storage:	5% to 95% Non-condensing

Electrical/Mechanical Approvals

Safety	Conforms to all standards normally supported by Allied Telesis products including safety standards EN 60950 (TUV), UL 60950 (cULus), CE compliant, EN 60825
Standard	IEEE 802.3, IEEE 802.3u
Immunity	Conforms to EN 55024 immunity standard EMI/RFI FCC Class A, EN 55022 Class A, VCCI Class A, C-TICK

Ordering Information

AT-MC1004-xx
Gigabit Ethernet media converter, 1000T to 1000SX (SC)

AT-MC1008/GB-xx
Gigabit Ethernet media converter, 1000T to GBIC

AT-MC1008/SP-xx
Gigabit Ethernet media converter, 1000T to SFP

Where xx = 10 for US
20 for European
30 for UK
40 for Australian

Associated Products

AT-MCR12-xx
12 slot power distribution chassis

AT-TRAY4
19-inch rack-mount chassis for up to four media converters

AT-TRAY1
19-inch rack-mount chassis for one media converter

AT-WLMT
Wall-mount bracket for one media converter

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