



# **AT-MC1004**

# Pluggable Media Converter

## **AT-MC1004**

1000T to 1000SX media converter

#### **Overview**

The AT-MC1004 Ethernet media converter is 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 a 1000SX port.

## **Extend the Distance of Ethernet**

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.

# **Key Features**

- System and port LEDs
- Auto-sense MDI/MDI-X
- Full-duplex operation
- Cost effective migration from Gigabit copper to Gigabit fiber
- MissingLink<sup>™</sup> and Smart MissingLink<sup>™</sup> troubleshooting features
- External AC power adapter
- Standalone, wall or rack-mountable into the AT-MCR12 chassis
- Jumbo frames up to 10K

Allied Telesis www.alliedtelesis.com

# AT-MC1004 | Pluggable Media Converters

#### 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**

<b>PWR</b>	Green	Indicates that the converter
		power is ON
	OFF	Indicates that the converter
		has no power signal

#### **Fiber Optic Port LEDs**

11501	Optic i oi	
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:	10.5cm x 9.5cm x 2.5cm
$(W \times D \times H)$	(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%
nput supply voltage	12vDC +/-5%
Max current	0.5A

## Max current 0.5A Power consumption 6W

# **Environmental Specifications**

Max operating temp:	0°C to 40°C
Max storage temp:	(32°F to 104°F) -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), UĽ 60950 (cULus),
	CE compliant, EN 60825

Standard IEEE 802.3, IEEE 802.3u

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)

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-TRAYI

19-inch rack-mount chassis for one media converter

#### AT-WLMT

Wall-mount bracket for one media converter

USA Headquarters | 19800 North Creek Parkway | Suite 100 | Bothell | WA 98011 | USA | T: +1 800 424 4284 | F: +1 425 481 3895 European Headquarters | Via Motta 24 | 6830 Chiasso | Switzerland | T: +41 91 69769.00 | F: +41 91 69769.11 Asia-Pacific Headquarters | 11 Tai Seng Link | Singapore | 534182 | T: +65 6383 3832 | F: +65 6383 3830

www.alliedtelesis.com

© 2011 Allied Telesis Inc. All rights reserved. Information in this document is subject to change without notice. All company names, logos, and product designs that are trademarks or registered trademarks are the property of their respective owners.





