**AT-MC1004**

**Pluggable 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**

- 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
- Jumbo frames up to 10K

* 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
- **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 indicates MissingLink mode is enabled; OFF indicates MissingLink mode is disabled.
- **SML**: Green indicates Smart MissingLink mode is enabled; OFF indicates Smart MissingLink mode is disabled.
- **LT**: Green indicates Link Test mode is enabled; OFF indicates Link Test mode is disabled.

Physical Characteristics
- **Dimensions**: 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°C 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**: 5% to 95%
- **Operating and storage**: 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
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<th>Gigabit Ethernet media converter, 1000T to 1000SX (SC)</th>
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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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