# AT-MC10 Series, Ethernet Media Converters

AT-MC13, UTP to fiber ST Ethernet media converter
AT-MC14, UTP to fiber SC Ethernet media converter
AT-MC15, UTP to BNC Ethernet media converter
AT-MC16, UTP to fiber ST single-mode Ethernet media converter





# **KEY FEATURES**

Half and Full Duplex operation (Excluding AT-MC15, Half Duplex only)

Fits the AT-MCR12 rackmount chassis

MDI/MDIX

MissingLink™ (Excluding AT-MC15, N/A)

Link Test (Excluding AT-MC15, N/A)

### FIBER CONNECTIONS

The Allied Telesyn range of Ethernet media converters provides a complete family of conversion devices, allowing users to extend the size of UTP networks with the use of fiber cabling. Supporting all major fiber connectors, with support for both multi and single-mode fiber, these converters can be used to extend networks with up to 15km of fiber.

### **AUTO-NEGOTIATION AND MISSINGLINK™**

When connecting media converters to auto-negotiating Fast Ethernet switches, these media converters (except the AT-MC13 & AT-MC14) will automatically connect the link in either Ethernet Full or Half-Duplex mode, allowing the link to be established with the greatest bandwidth. In addition, the Missing Link feature (except AT-MC15) allows switches or hubs 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

All the media converters with a UTP connection feature an internal MDI/MDIX switch, allowing the converter to be connected to either a PC, hub or switch, with a simple UTP cable. The media converters also allow the installer to test the integrity of the 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 fiberoptic test equipment.

# STANDALONE OR RACKMOUNTED

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 rackmount 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 rackmount chassis.

## ABOUT ALLIED TELESYN, INC.

Allied Telesyn, Inc. leads the world in network technologies for the access edge. Since the company's inception in 1987, Allied Telesyn has been developing IP-based network products for use in video, voice and data networks at the metro edge, in education, government agencies and across the enterprise. Allied Telesyn's access, aggregation and core transport technologies range from simple Ethernet adapters, hubs and media converters to robust multi-layer Gigabit Ethernet switches and routers, wireless systems, DTM and WDM transport solutions for delivering real-time voice, video and data. Allied Telesyn's comprehensive support and professional service programs are suited to meet the growing demands of today's switched broadband infrastructures.

### **SERVICE & SUPPORT**

Allied Telesyn provides value-added support services for its customers under its Net.Cover<sup>SM</sup> programs. For more information on Net.Cover<sup>SM</sup> support programs available in your area, contact your Allied Telesyn sales representative or visit our website.

www.alliedtelesyn.com

# AT-MC10 Series, Ethernet Media Converters

# STATUS INDICATORS

Front Panel:

Power (PWR) Indicates power is applied to the converter Link (LNK) (2) Indicates a valid receive link exists Receive (REC) (2) Indicates valid data being received by converter

Normal (NML) Indicates product is working in normal mode On Line

Indicates BNC port is connected

to an active 10Base2 segment (MC15 only)

2.2 to 2.8v

Collision (COL) Indicates BNC port is sensing a collision signal (MC15 only)

# PACKET TRANSMISSION CHARACTERISTICS

0.4µ Maximum Round Trip Delay Bit Error Rate (BER) <10 -12

## TWISTED PAIR INTERFACE

Transmitter Worst **Typical** Peak Differential

2.5v Signal Amplitude  $\pm 3.2 \text{ns}$ Transmitter Jitter Harmonics Content 27dB below fund.

Common Mode

Output Voltage:

Receiver:

Silence 0ν +50mvLink Test Pulse 105 to 135ns 130ns Output Impendance  $100 \Omega$ 85 to 115  $\Omega$ 100m

UTP Length

Receiver Threshold -400mv -300 to 585mv

Differential Noise 300mv

## **POWER CHARACTERISTICS**

External Power Supply 100-240vAC, 50/60Hz +/-3%

Input Supply Voltage 12vDC +/-5% Max Current .5 **Power Consumption** 6W

## **ENVIRONMENTAL SPECIFICATIONS**

Operating Temp. 0°C to 40°C Storage Temo. -20°C to 80°C

5% to 95% noncondensing Relative Humidity Operating Altitude 0 to 10.000 feet

# PHYSICAL CHARACTERISTICS

Dimensions 10.5cm x 9.5cm x 2.5cm (4.12" x 3.75" x 1.0")

294g (10.4oz) Weight

### **ELECTRICAL/MECHANICAL APPROVALS**

FCC Class A

UL-Cul, CSA/CSA, NRTL, TUV, CE compliant Safety

## ORDERING INFORMATION

AT-MC13-xx

UTP to fiber media converter with ST fiber connectors

AT-MC14-xx

UTP to fiber media converter with ST fiber connectors

AT-MC15-xx

UTP to BNC Media Converter

AT-MC16-xx

UTP to fiber media converter with ST SingleMode fiber connectors

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

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