Allied Telesis™

AT-MC13

Ethernet Media Converters

AT-MC13
UTP to fiber ST Ethernet media converter

Fiber Connections

The Allied Telesis 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.

MissingLink™

The MissingLink feature 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

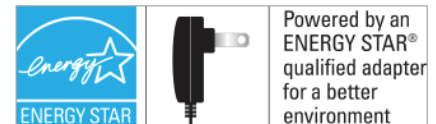All the media converters with a UTP connection feature an internal MDI/MDI-X switch, allowing the converter to be connected to either a PC, hub or switch, with a simple UTP cable. The media converters also allow the installer to test the integrity of the fiber connection, by forcing the converters to communicate over the fiber cable. This 'Link Test' feature allows installers to check for cable faults without the need for expensive fiber optic test equipment.

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 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.

Key Features

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

▶ Half and full-duplex operation

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

▶ MDI/MDI-X

▶ MissingLink

▶ Link test

*Compared to previous models

Technical Specifications

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

Packet Transmission Characteristics

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

Twisted Pair Interface

Transmitter	Typical	Worst
Peak differential		
Signal amplitude	2.5v	2.2 to 2.8v
Transmitter jitter	±3.2ns	
Harmonics content	27dB below fund	
Common mode	4v	
Output Voltage:		
Silence	0v	+50mv
Link Test pulse	130ns	105 to 135ns
Output impendance	100Ω	85 to 115Ω
UTP length	100m	
Receiver:		
Receiver threshold	-400mv	-300 to 585mv
Differential noise	300mv	

Power Characteristics

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

Environmental Specifications

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

Physical Specifications

Dimensions	10.5 cm × 9.5 cm × 2.5 cm
(W × D × H)	4.12 in × 3.75 in ×1.00 in
Weight	294g (10.4 oz)

Electrical and Mechanical Approvals

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

Ordering Information

AT-MC13-xx
UTP to fiber media converter with ST fiber connectors

Where xx = 60 AC power supply, Universal power cord

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