



AT-MC300 SERIES

Fast Ethernet Media Converters

AT-MC301-xx

TX to FX media converter with VF-45 connector

AT-MC302-xx

TX to FX media converter with MT-RJ connector

HIGH-SPEED MEDIA CONVERTERS

Allied Telesyn's AT-MC300 family of high-speed media converters allow network managers to cost-effectively convert 100TX connections to 100FX quickly and reliably. The VF-45 and MT-RJ fiber-optic connectors are designed to maximize conversion options and network design flexibility.

THE BENEFITS OF FIBER

Enterprises continue to deploy Fast Ethernet at an impressive rate. Along with switching to higher speed LANs, a growing number of networking professionals are installing fiber in key areas of the network—a move that enhances cable distances, security features, and bandwidth capabilities. Because of the demand for fiber, cable installers have developed a cleaner and faster way to install cable utilizing new small form-factor connectors. Although the VF-45 connector is the same size as the current RJ-45 style connector, the MT-RJ is smaller than the RJ-45.

The introduction of fiber into copper infrastructures presents the network manager with unique challenges. And having the ability to convert RJ-45 copper ports into fiber connections has become an invaluable solution.

HIGH QUALITY, LOW COST

Allied Telesyn's AT-MC300 family of media converters provide an elegant, low cost method of adding fiber connectivity into today's high-speed networks. Offering plug-and-play installation and a compact chassis design, the media converters are the perfect solutions for a wide variety of networking environments. Constructed from high-quality materials the AT-MC300 series is designed to be an integral component of Fast Ethernet networks.

MISSINGLINK™

The MissingLink™ feature allows the ports on the media converter to convey the status of their links. When the media converter detects a problem with a port—such as the loss of connection to a node—it shuts down the connection, thereby notifying the node that the connection has been lost. The value of this network monitoring and fault notification is that some hubs and switches are configured to take action in the event of the loss of connection on a port. In some cases, the unit is configured either to seek a redundant path or alert the network administrator of the problem.

SIMPLE INSTALLATION

Both media converters feature an internal MDI/MDIX switch, enabling the converter to connect to a PC, hub, or switch with a simple UTP cable. The media converters can also test the integrity of connections by forcing data across the fiber cable—enabling installers to check for cable faults without the need for expensive fiber-optic test equipment. The AT-MC300 family utilizes six status indicator LEDs located on the front of the unit. These LEDs provide network status for both the TX and FX ports.

HASSLE FREE SUPPORT

The AT-MC300 family employs the latest IC designs and surface mount technology to provide highly reliable, yet inexpensive solutions to network media conversion. With a lifetime warranty and free technical support, the AT-MC300 family represents excellent networking value.

KEY FEATURES

- Small size
- Rack-mountable using optional AT-MCR12, TRAY4, or TRAY1 chassis
- Plug-and-play installation
- VF-45 and MT-RJ connector options for multi-mode fiber
- MDI/MDIX crossover switch
- MissingLink™ status feature
- Link test switch
- Supports Full- & Half-Duplex operation
- Small external power adapter
- Lifetime warranty
- Free technical support

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STATUS INDICATORS

Front Panel:	
Power (PWR)	Indicates power is applied
Input Supply Voltage	12vDC +/-5% to the converter
Link (LNK) (2)	Indicates a valid receive link exists
Receive (REC) (2)	Indicates converter is receiving valid data
Normal (NML)	Indicates product is working in normal mode
Sensitivity	-34.5 dBm average

PACKET TRANSMISSION CHARACTERISTICS

Round Trip Delay	0.4µs maximum
Bit Error Rate (BER)	<10

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 Tempo.	-20°C to 80°C
Relative Humidity	5% to 95% non-condensing
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")
Weight	294g (10.4oz)

ELECTRICAL/MECHANICAL APPROVALS

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

ORDERING INFORMATION

AT-MC301-xx
TX to FX media converter with VF-45 connector

AT-MC302-xx
TX to FX media converter with MT-RJ connector

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

Port Type (Connector)	Cable Distance	Optical Frequency	Launch Power (dBm)			Receive Power (dBm)		
			Max.	Avg.	Min.	Min. Sensitivity	Typical Sensitivity	Saturation
10T UTP Copper	100m							
102 Coax Copper	185m							
10FL MMF	2km	850nm	-10.0	-12.0	-15.0	-41.4	-43.0	-7.6
10FL SMF	15km	1310nm	-17.0	-21.0	-23.0	-41.5	-45.0	-14.0
100TX UTP Copper	100m							
100FX MMF	2km	1310nm	-14.0	-16.8	-19.0	-31.8	-34.5	-14.0
100SX MMF	300m	850nm	-10.0	-12.0	-15.0	-41.4	-43.0	-7.6
100FX SMF (15km)	15km	1310nm	-8.0	-11.5	-15.0	-31.0	-31.0	-8.0
100FX SMF (40km)	40km	1310nm	0.0	-3.0	-5.0	-35.0	-38.0	0.0
100FX SMF (75km)	75km	1310nm	0.0	-2.0	-4.0	-37.0	-37.0	-3.0
100FX SMF (100km)	100km	1550nm	0.0	-1.5	-3.0	-37.0	-37.0	-3.0
1000T UTP Copper	100m							
1000SX MMF	220-550m	850nm	-4.0	-7.0	-10.0	-16.0	-16.0	0.0
1000LX SMF (10km)	10km	1310nm	-3.0	-6.3	-9.5	-20.0	-20.0	-3.0
1000LX SMF (20km)	20km	1310nm	0.0	-1.5	-3.0	-24.0	-24.0	-3.0
1000LX SMF (40km)	40km	1550nm	0.0	-2.5	-5.0	-24.0	-24.0	-3.0
1000LX SMF (70km)	70km	1550nm	5.5	2.8	0.0	-24.0	-24.0	-3.0

ABOUT ALLIED TELESYN

Allied Telesyn was founded in 1987 with the goal of producing reliable, standards-based networking products. Focused on Ethernet/IP solutions geared to applications, Allied Telesyn offers access-edge products like switches, fiber/copper MAPs, and CPE. We're also a leading global manufacturer of media converters, unmanaged switches, and NICs. Our customer-driven approach has made Allied Telesyn the ideal choice for IT professionals looking for high-quality, feature-rich network solutions at a lower price. Allied Telesyn – It's Our Network, Too.

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