

## Fast Ethernet Media Converter Solution

### AMC210 Series

- 10/100 Mbps port with full/half-duplex auto-negotiation
- IEEE802.3 10Base-T
- IEEE802.3u/100Base-TX/FX
- IEEE802.3x flow control
- 155 Mbps memory bandwidth
- Automatic identification of MDI/MDI-X cross-line
- Complies with FCC, 15 CLASS A, RoHS, and CE MARK



AMC210 Series Fast Ethernet Media Converter is an economical series of high-performance converters that comply with IEEE 802.3 standards. AMC200 GE converters transform the transmission media of Ethernet signal from CAT5 to optical fiber. It can extend the transmission distance from a few hundred meters to hundred kilometers.

This converter can be used as a standalone unit in point to point applications with external power supply modules or a plug-in module to fit the AMC 19-inch converter chassis to save space, and capital expenditure.

AMC210 series converters are also compatible with various SFPs for different applications. The platform provides high-density ports to allow operators to quickly and easily expand existing networks and services. AMC200 series offers compatibility with all existing Ethernet or Fast Ethernet devices in a network and provides high-performance data transmission with seamless cooperation with ACT routing and switching products

## Key Features

- Complies with IEEE 802.3 10 Base-T standard.
- Complies with IEEE 802.3u 10/100 Base-TX/FX standard
- Complies with IEEE 802.3X standard
- 10/100/ Mbps port with full/half duplex auto-negotiation
- Back pressure flow control for full duplex
- Twisted-pair connector: NODE/HUB or SWITCH (5 class UTP)
- Back pressure flow control for full/half duplex IEEE802.3X
- Automatic identification of MDI/MDI-X cross-line
- High-performance 155 Mbps memory bandwidth
- Complies with FCC, 15 CLASS A, RoHS, and CE MARK

## Application Diagram



## LED Indicator Lamps

LED indicator lamp	Status	Explanation
FX Link/Act	On	Connection status display for fiber link. "ON" indicates that Fiber link is in correct connection.
	Blink	Active status display of fiber link "Blink" indicates packet goes through Fx end.
TP Link/Act	On	Connection status display for electric link. "ON" indicates that electric link is in correct connection.
	Blink	Active status display of electric link "Blink" indicates packet goes through Tx end.
DUP	On	Transceiver works in the full duplex mode.
	Off	Transceiver works in the half duplex mode.
PWR	On	Power is on and normal.
SD	On	Fiber signal is detected.
100	On	Transfer rate of electric interface is 100 Mbps.
	Off	Rate of electric interface is 10 Mbps

## Specifications

Item	Description
<b>Standard Protocol</b>	IEEE802.3 10 Base-T standard
	IEEE802.3u 10/100Base-TX/FX standard
	IEEE 802.3d standard.
	IEEE 802.3Q standard.
<b>Bandwidth</b>	RJ 45 Port: 10/100 Mbps
	Optical Port: 155Mbps
<b>Fiber Mode (SM, Duplex)</b>	
Tx 1310 nm, Rx 1310 nm	Tx Power: -13 dBm to -4 dBm
	Rx Sensitivity: ≤-33 dBm
<b>Fiber Mode (SM, Simplex)</b>	
Tx 1550 nm, Rx 1310 nm	Tx Power: -13 dBm to -4 dBm
Tx 1310 nm, Rx 1550 nm	Rx Sensitivity: ≤-33 dBm
<b>Operation Mode</b>	Full / half duplex mode
<b>Connectors</b>	UTP: RJ-45
	Fiber connector: SC/ST/FC
<b>Operation Mode</b>	Full /Half duplex mode
<b>LED Indicators</b>	POWER, FPL, 10/100, FRX, TRX, FDX.
<b>Power Supply</b>	
Internal	AC: 110 V <sub>AC</sub> to 250 V <sub>AC</sub> / 50 Hz
	DC: -48 V <sub>DC</sub>
External	DC-5V
Power Consumption	≤5W

## Environmental Parameters

Work Temperature	0 °C to +55 °C
Storage Temperature	-40 °C to +70 °C
Humidity	5 % to 90 % (non-condensing)
<b>TP Cable</b>	Cat5 UTP cable (max distance: up to 100 m)
<b>Fiber Cable</b>	8.3/125, 8.7/125, 9/125, 10/125 μm (max distance: 20 km to 120 km) 50/125, 62.5/125 μm (max distance: 2 km to 5 km)
<b>MTBF</b>	100,000 hours
<b>Dimensions (L × W × H)</b>	115 mm × 77 mm × 26 mm (card type without metal box) 94 mm × 70 mm × 25 mm (external power supply) 140 mm × 110 mm × 30 mm (internal power supply)

## Chassis Parameters

Item	Description
No. of Slots	16
Media Converters Adapted	10M, 100M, 1000M, 10/100M, 10/100/1000M
Power In	AC: 100 V to 260 V DC 48 V
Power Out	DC 5V, 12A
DC Plug Diameter	2.5/5.5 mm
Ripple	≤50 mV
Noise	≤50 mV
Protection of Power Supply	Circuit breaker when overvoltage, circuit breaker when overflow, circuit breaker when short circuit
Operating Temperature	0 °C to +50 °C
Storage Temperature	-20 °C to +85°C
Humidity	5 % to 95 %
Dimensions (L×W×H)	485 mm × 231 mm × 90 mm 19 inches 2U

## Ordering Information

Product Name	Product Description
AMC-SHELF-MC-16-AC2	AMC 16 slots Media Converter shelf (Host 16 MC cards, no EMS card), with dual AC power supply
AMC210-T13-R13-20-SU-C	AMC210 Fast Ethernet Media Converter card unit, SM, Duplex, 10/100 Base-TX/FX Bridge Converter 20 km SC/UPC Connector (TX=1310 nm, RX1310 nm)
AMC210-T13-R13-20-SU-AC	AMC210 Fast Ethernet Media Converter stand-alone unit, SM, Duplex, 10/100 Base-TX/FX Bridge Converter 20 km SC/UPC Connector (TX=1310 nm, RX1310 nm), AC power supply
AMC210-T15-R13-20-SU-AC	AMC210 Fast Ethernet Media Converter, 10/100 Base-TX/FX Bridge Converter, 20 km SC Connector (TX=15500 nm, RX1310 nm), AC power supply
AMC210-T13-R15-20-SU-AC	AMC210 Fast Ethernet Media Converter, 10/100 Base-TX/FX Bridge Converter, 20 km SC Connector (TX=1310 nm, RX1550 nm), AC power supply

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