

## Product Specification

MC-413W, MC-415W, MC-613W, MC-615W,  
MC-813W, MC-815W, MC-213WL, MC-215WL,  
MC-413WL, MC-415WL, MC-613WL, MC-615WL,  
MC-813WL, MC-815WL  
**10/100M Dual Fiber Media Converter**



### 1. Features

- LFPT (Link Fault Pass Through) Function optional
- Provide one Single Fiber Connector and one UTP Connector
- Fully Complies with IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/FX standard
- Auto-detection of half/full duplex transfer mode for Tx port
- Auto-negotiation of 10/100Mbps rate and Auto-MDI/MDIX for Tx port
- Provide switch configuration of half/full duplex transfer mode for Fx port
- Extend fiber distance up to 120km for single-mode fiber
- Indication light: FEF, SPD, 100, Link/Act, PWR, FDX
- Easy-to-view LED indicators provides status to easily monitor network activity
- External power supply and Internal Power Supply

### 2. Product Description

MC-413W, MC-415W, MC-613W, MC-615W, MC-813W, MC-815W, MC-213WL, MC-215WL, MC-413WL, MC-415WL, MC-613WL, MC-615WL, MC-813WL, MC-815WL Media Converter is 10/100Mbps Fast Ethernet Converter. The Converter mediates between a 10/100Base-Tx segment and a 100Base-FX segment. It is primarily designed for large, higher speed/bandwidth demanding workgroups that require expansion of the Ethernet network. It can extend the conventional 10M Ethernet or 100M Fast Ethernet to 20km-120km via the fast

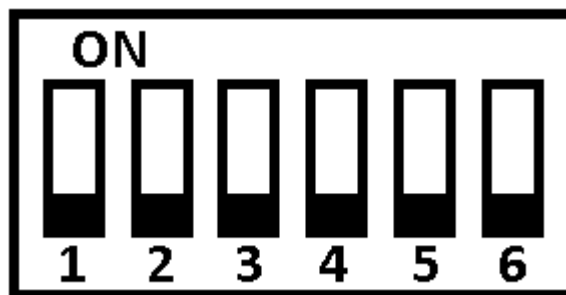
Ethernet Fiber-optical Line. It is high-performance, cost effective and flexible solutions for a wide range of applications in the field of LAN campus network.

### 3 LED Indications

Front panel may contain LED indicators:

LED	Status	Indication
PWR	Steady	The Power is on
TXL	Steady	Lit When UTP cable connection with remote device is good
	Off	No connection
FXL	Steady	A valid network connection established on Fiber port
	Flash	FX dataexchange
SPD	Off	No connection
	Steady	When PT data rtansmission speed is 100M
	Off	When PT data rtansmission speed is 10M
	Flashing	Collision occurred
1000M	Off	Connection in half-duplex mode
	Steady	Ethernet Speed is 1000Mbps
100M	Off	Ethernet Speed is 100Mbps
	Steady	Ethernet Speed is 100Mbps
TX	Off	Ethernet Speed is 1000Mbps
	Steady	Transmitting data
RX	Steady	Receiving data

All Media Converters with LFP function have control interface on back panel:



The DIP switch in front panel is marked 1-6 from left to right, the definition of the setting is as below:

1	2	3	Function
OFF	OFF	OFF	Auto-negotiation(default setting)
ON	OFF	OFF	Compelling 100M full duplex



**A-GEAR World Wide Manufacturing**

//////////////////////////////////// v.1.1

1	2	3	Function
ON	OFF	ON	Compelling 100M half duplex
ON	ON	OFF	Compelling 10M full duplex
ON	ON	ON	Compelling 10M half duplex

4-OFF;

5-OFF - store-and-forward mode (default setting)

4-ON;

5-OFF - straightforward mode

6 - FPT function;

ON-open;

OFF-close

**Notice:**

When start up LFPT function, please pay attention to set the DIP switch 6 to "ON" firstly, then power on the product.

## 4. Installation

As with any electric device, you should place the equipment where it will not be subject to extreme temperatures, humidity, or electromagnetic interference. Specifically, the site you select should meet the following requirements:

Please follow the steps to install the media converter. This Converter is a plug-and-play device.

1. Turn off the power of the device/station in the network in which the media converter will be installed.
2. Ensure that there is no activity in the network.
3. Attached fiber cable from the media converter to the fiber network. The fiber connections must be matched—Transmit socket to receive socket
4. Attached a UTP cable from the 100Base-Tx network to the RJ-45 port on the
5. Connect the power cord to the the media converter and check if the power LED lights up. The TP Link and FX link LEDs will light when all the cable connections are satisfactory.
6. Turn on the power of the device/station.

## 5. Specification

Standard	IEEE802.3 10BASE-T Ethernet IEEE802.3u 100BASE-TX/FX Fast-Ethernet IEEE802.3x		
RJ-45 Port	Auto-MDI/MDIX		
Fiber Port	Fiber Type	Wavelength	Send-Power
	SC/ST/FC	1310/1550nm	SMF: -20 dBm (min.) 0 dBm (max.)





**A-GEAR World Wide Manufacturing**

//////////////////////////////////// v.1.1

<b>Network Cable</b>	10BASE-T: Category 3,4 or 5 UTP/STP (Max: 100m) EIA/TIA- 568 100 Ω STP (Max: 100m) 100BASE-TX: 2pairs of category 5 UTP (Max: 100m) EIA/TIA- 568 100 Ω STP (Max: 100m) 100BASE-FX: SMF: 8.3/125,8.7/125,9/125,10/125μm (20~120km)
<b>Dimensions(WxDxH)</b>	94x71x27mm (External power) 157x129x32 mm (Internal power)
<b>Input Voltage</b>	DC5V1A (External power input : AC100V-AC240V/50-60HZ) AC100V-AC240V and DC-48V is optional (Internal power)
<b>Power Consumption</b>	5w (External Power)
<b>Operation Temperature</b>	0°C~70°C
<b>Store Temperature</b>	-40°C~85°C
<b>Humidity</b>	5%~95% non-condensing
<b>Net Weight</b>	0.45kg (External Power), 0.85kg (Internal Power)

**6. Ordering Information**

Part Number	Detail Description
MC-213W	Single Fiber, Singlemode, 100Mb, 20km, SC Connector TX1310 RX1550 5V DC ext.Power suply
MC-215W	Single Fiber, Singlemode, 100Mb, 20km, SC Connector TX1550 RX1310 5V DC ext.Power suply
MC-413W	Single Fiber, Singlemode, 100Mb, 40km, SC Connector TX1310 RX1550 5V DC ext.Power suply
MC-415W	Single Fiber, Singlemode, 100Mb, 40km, SC Connector TX1550 RX1310 5V DC ext.Power suply
MC-613W	Single Fiber, Singlemode, 100Mb, 60km, SC Connector TX1310 RX1550 5V DC ext.Power suply
MC-615W	Single Fiber, Singlemode, 100Mb, 60km, SC Connector TX1550 RX1310 5V DC ext.Power suply
MC-813W	Single Fiber, Singlemode, 100Mb, 80km, SC Connector TX1310 RX1550 5V DC ext.Power suply
MC-815W	Single Fiber, Singlemode, 100Mb, 80km, SC Connector TX1550 RX1310 5V DC ext.Power suply
MC-213WL	Single Fiber, Singlemode, 100Mb, 60km, SC Connector TX1310 RX1550 5V DC ext.Power suply with LFP
MC-215WL	Single Fiber, Singlemode, 100Mb, 60km, SC Connector TX1550 RX1310 5V DC ext.Power suply with LFP



MC-413W, MC-415W, MC-613W, MC-615W, MC-813W, MC-815W, MC-213WL, MC-215WL, MC-413WL, MC-415WL, MC-613WL, MC-615WL, MC-813WL, MC-815WL

datasheet

**A-GEAR World Wide Manufacturing**

//////////////////////////////////// v.1.1

Part Number	Detail Description
MC-413WL	Single Fiber, Singlemode, 100Mb, 80km, SC Connector TX1310 RX1550 5V DC ext.Power suply with LFP
MC-415WL	Single Fiber, Singlemode, 100Mb, 80km, SC Connector TX1550 RX1310 5V DC ext.Power suply with LFP
MC-613WL	Single Fiber, Singlemode, 100Mb, 60km, SC Connector TX1310 RX1550 5V DC ext.Power suply with LFP
MC-615WL	Single Fiber, Singlemode, 100Mb, 60km, SC Connector TX1550 RX1310 5V DC ext.Power suply with LFP
MC-813WL	Single Fiber, Singlemode, 100Mb, 80km, SC Connector TX1310 RX1550 5V DC ext.Power suply with LFP
MC-815WL	Single Fiber, Singlemode, 100Mb, 80km, SC Connector TX1550 RX1310 5V DC ext.Power suply with LFP

