# TP-LINK

## **Media Converters & Chassis**



# **System Overview**

The Chassis-based Media Converters include a number of independent media converters and a chassis capable of housing up to 14 media converters. You can start with single media converters, each equipped with its own housing and AC power adapter. When you require more room, you can mount a chassis in your equipment rack and install your media converters in the chassis ------the media converter can be slid into the chassis.

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#### **TL-MC1400 14-Slot Rackmount Chassis**

The TL-MC1400 14-Slot Rackmount Chassis is specially designed for accommodating chassis-based Media Converters. It is a standard 19-inch 2U height rackmount chassis which can be suitably mounted in the standard 19-inch rack.

The chassis lets you install multiple media converters in an equipment rack together with the network devices for which they provide media conversion. This provides for space saving, and the cabling will look neat. The chassis comes with its own universal AC to DC power supply. For maximum power availability, an optional redundant power supply is available for installation in the chassis.

#### **Features:**

- 14 bays to house up to 14 media converters
- Standard 19-inch rack-mountable with, 2U height
- Non-stop operation & minimal downtime
- Allows hot-swapping of media converters
- Hot swappable redundant power supplies
- Cooling fans on back side (together with power supplies)
- Second AC to DC power supply for load-sharing purposes (Optional)
- Media converter power isolation for electrical isolation from each bay
- Offers over-voltage and over-current protections

## specifications:

AC Power Supply	Input: 100-240V~50/60Hz 3.0A(Max)  Output:+9.5VDC, 9.5A(Max)  Vripple: ≤50mv  Noise: ≤100mv	
Operating Temperature	0°C~40°C (32°F~104°F)	
Storage Temperature	-40°C~70°C (-40°F~158°F)	
Operating Humidity	10%~90% non-condensing	
Storage Humidity	5%~90% non-condensing	
Dimensions (W*D*H)	19.0*14.1*3.4in.(482*358*86) Standard 19-Inch, 2U height	
Weight	8Kg	

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## **MC200CM**

The MC200CM media converter converts 1000BASE-SX fiber to 1000Base-T copper media or vice versa. It is designed for use with 850nm multi-mode fiber cable utilizing the SC-Type connector, transmitting data up to 0.55 kilometers away. What's more, MC200CM can work as a stand alone device (no chassis required) or with TP-LINK's 19'system chassis.

#### **Features:**

- Works at 1000Mbps in Full-Duplex mode for both TX port and FX port
- Supports auto MID/MID-X for TX port
- Provides switch configuration of Force / Auto transfer mode for FX port
- Link Fault Passthrough and Far End Fault minimize the losses caused by link failure timely
- Extends fiber distance up to 0.5km
- Easy-to-view LED indicators provide status to monitor network activity easily

## specifications:

Standards and Protocols	IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x		
Basic Function	Full Duplex Flow Control (IEEE 802.3x)3  Extends fiber distance up to 0.5km using 50/125um fiber, 0.22km using 62.5/125um fibe Link Fault Passthrough and Far End Fault minimize the loss caused by link failure timely		
Output Center Wavelength	850nm		
Ports	1 1000M SC port 1 1000M RJ45 port (Auto MDI/MDIX)		
Network Media	1000BASE-T: UTP category 5, 5e cable (maximum 100m)  EIA/TIA-568 100Ω STP (maximum 100m)  1000BASE-FX: Multi-mode Fiber		
LED Indicators	PWR, FDX/Col, LINK/Act, SPD		
Safety & Emission	FCC, CE		
Dimensions (W*D*H)	3.7*2.9*1.1 in. (94.5*73.0*27.0 mm)		
Environment	Operating Temperature: 0°C~40°C (32°F~104°F)  Storage Temperature: -40°C~70°C (-40°F~158°F)  Operating Humidity: 10%~90% non-condensing  Storage Humidity: 5%~90% non-condensing		
Power Supply	External Power Adapter		

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#### **MC210CS**

The MC210CS media converter converts 1000BASE-LX/LH fiber to 1000Base-T copper media or vice versa. It is designed for use with 1310nm single-mode fiber cable utilizing the SC-Type connector, transmitting data up to 15 kilometers. What's more, MC210CS can work as a stand alone device (no chassis required) or with TP-LINK's 19' system chassis.

#### **Features:**

- Works at 1000Mbps in Full-Duplex mode for both TX port and FX port
- Supports auto MID/MID-X for TX port
- Provides switch configuration of Force / Auto transfer mode for FX port
- Link Fault Passthrough and Far End Fault minimize the losses caused by link failure timely
- Extends fiber distance up to 15km
- Easy-to-view LED indicators provide status to monitor network activity easily

## specifications:

Standards and Protocols	IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x		
Basic Function	Full Duplex Flow Control (IEEE 802.3x)  Extends fiber distance up to 15km  Link Fault Passthrough and Far End Fault minimize the losses caused by link failure timely		
Output Center Wavelength	1310nm		
Ports	1 1000M SC port 1 1000M RJ45 port (Auto MDI/MDIX)		
Network Media	1000BASE-T: UTP category 5, 5e cable (maximum 100m) $ EIA/TIA-568\ 100\Omega\ STP\ (maximum\ 100m) $ 1000BASE-FX: Multi-mode Fiber		
LED Indicators	PWR, LINK, RX		
Safety & Emission	FCC, CE		
Dimensions (W*D*H)	3.7*2.9*1.1 in. (94.5*73.0*27.0 mm)		
Environment	Operating Temperature: 0°C~40°C (32°F~104°F)  Storage Temperature: -40°C~70°C (-40°F~158°F)  Operating Humidity: 10%~90% non-condensing  Storage Humidity: 5%~90% non-condensing		
Power Supply	External Power Adapter		

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# MC220L

The MC220L converts 1000BASE-SX/LX/LH fiber to 1000Base-T copper media or vice versa. It is designed for use with 850nm multi-mode/ 1310nm single-mode/ WDM fiber cable utilizing the SC/LC-Type connector, transmitting data up to 0.55 kilometers or 10 kilometers. What's more, MC220L can work as a stand alone device (no chassis required) or with TP-LINK's 19'system chassis.

#### **Features:**

- Works at 1000Mbps in Full-Duplex mode for both TX port and FX port
- Supports auto MID/MID-X for TX port
- Provides switch configuration of Force / Auto transfer mode for FX port
- FX port support hot-swappable
- Extends fiber distance up to 0.55km for multi-mode fiber and 10km for single-mode fiber
- Easy-to-view LED indicators provide status to monitor network activity easily

#### specifications:

Standards and Protocols	IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x		
Basic Function	Full Duplex Flow Control (IEEE 802.3x)  Extends fiber distance up to 15km  Link Fault Passthrough and Far End Fault minimize the losses caused by link failure timely		
Output Center Wavelength	1310nm		
Ports	1 1000M SC port 1 1000M RJ45 port (Auto MDI/MDIX)		
Network Media	1000BASE-T: UTP category 5, 5e cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m) 1000BASE-FX: Multi-mode Fiber		
LED Indicators	PWR, LINK, RX		
Safety & Emission	FCC, CE		
Dimensions (W*D*H)	3.7*2.9*1.1 in. (94.5*73.0*27.0 mm)		
Environment	Operating Temperature: 0°C~40°C (32°F~104°F)  Storage Temperature: -40°C~70°C (-40°F~158°F)  Operating Humidity: 10%~90% non-condensing  Storage Humidity: 5%~90% non-condensing		
Power Supply	External Power Adapter		

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## **MC100CM**

The MC100CM media converter converts 100BASE-FX fiber to 100Base-TX copper media or vice versa. It is designed for use with 1310nm multi-mode fiber cable utilizing the SC-Type connector, transmitting data up to 2 kilometers. What's more, MC100CM can work as a stand alone device (no chassis required) or with TP-LINK's 19" system chassis, and is equipped with Link Fault Pass-through which minimizes losses caused by link failure.

#### **Features:**

- Auto negotiation of 10/100Mbps and auto MID/MID-X for TX port
- Provide switch configuration of Half-Duplex / Full-Duplex transfer mode for FX port
- Link Fault Passthrough and Far End Fault minimize the loss caused by link failure timely
- Extend fiber distance up to 2km
- Easy-to-view LED indicators provide status to monitor network activity easily

## specifications:

Standards and Protocols	IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x		
Basic Function	Half/Full-Duplex transfer mode for FX port Full Duplex Flow Control (IEEE 802.3x)3 Half Duplex Flow Control (Backpressure) Extends fiber distance up to 2km Link Fault Passthrough and Far End Fault minimize the losses caused by link failure timely		
Ports	1 100M SC port 1 100M RJ45 port (Auto MDI/MDIX)		
Network Media	<ul> <li>10BASE-T: UTP category 3, 4, 5 cable (maximum 100m)</li> <li>EIA/TIA-568 100Ω STP (maximum 100m)</li> <li>100BASE-T: UTP category 5, 5e cable (maximum 100m)</li> <li>EIA/TIA-568 100Ω STP (maximum 100m)</li> <li>100BASE-FX: Multi-mode Fiber</li> </ul>		
LED Indicators	PWR, FDX/Col, LINK/Act, SPD		
Safety & Emission	FCC, CE		
Dimensions (W*D*H)	3.7*2.9*1.1 in. (94.5*73.0*27.0 mm)		
Environment	Operating Temperature: 0°C~40°C (32°F~104°F)  Storage Temperature: -40°C~70°C (-40°F~158°F)  Operating Humidity: 10%~90% non-condensing  Storage Humidity: 5%~90% non-condensing		
Power Supply	External Power Adapter		

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#### **MC110CS**

The MC110CS is a media converter designed to convert 100BASE-FX fiber to 100Base-TX copper media or vice versa. It's designed for use with single-mode fiber cable utilizing the SC-Type connector, transmitting data up to 20 kilometers. What's more, MC110CS can work as a stand alone device (no chassis required) or with TP-LINK's 19" system chassis, and is equipped with Link Fault Pass-through which minimizes losses caused by link failure.

#### **Features:**

- Auto negotiation of 10/100Mbps and auto MID/MID-X for TX port
- Provide switch configuration of Half-Duplex / Full-Duplex transfer mode for FX port
- Link Fault Passthrough and Far End Fault minimize the loss caused by link failure timely Extend fiber distance up to 20 60km
- Easy-to-view LED indicators provide status to monitor network activity easily

## specifications:

Standards and Protocols	IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x		
Basic Function	Half/Full-Duplex transfer mode for FX port Full Duplex Flow Control (IEEE 802.3x)3 Half Duplex Flow Control (Backpressure) Extends fiber distance up to 20km Link Fault Passthrough and Far End Fault minimize the losses caused by link failure timely		
Ports	1 100M SC port 1 100M RJ45 port (Auto MDI/MDIX)		
Network Media	<ul> <li>10BASE-T: UTP category 3, 4, 5 cable (maximum 100m)</li> <li>EIA/TIA-568 100Ω STP (maximum 100m)</li> <li>100BASE-T: UTP category 5, 5e cable (maximum 100m)</li> <li>EIA/TIA-568 100Ω STP (maximum 100m)</li> <li>100BASE-FX: Single-mode Fiber</li> </ul>		
LED Indicators	PWR, FDX/Col, LINK/Act, SPD		
Safety & Emission	FCC, CE		
Dimensions (W*D*H)	3.7*2.9*1.1 in. (94.5*73.0*27.0 mm)		
Environment	Operating Temperature: 0°C~40°C (32°F~104°F)  Storage Temperature: -40°C~70°C (-40°F~158°F)  Operating Humidity: 10%~90% non-condensing  Storage Humidity: 5%~90% non-condensing		
Power Supply	External Power Adapter		

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#### **MC111CS**

The MC111CS is a media converter designed to convert 100BASE-FX fiber to 100Base-TX copper media or vice versa. It's designed for use with single-mode fiber cable utilizing the SC-Type connector. Adopting WDM technology, MC111CS takes only one fiber to transmit and receive data, which saves you half of the cabling cost. On this fiber, it works at 1550nm on transferring data and at 1310nm on receiving data. So the other end device cooperating with the MC111CS will work at 1310nm on transferring data and at 1550nm on receiving data. Another of TP-LINK's media converters, the MC112CS is just one example of potential devices with which to cooperate with the MC111CS.Moreover, MC111CS can work as a stand alone device (no chassis required) or with TP-LINK's 19" system chassis, and is equipped with Link Fault Pass-through which minimizes losses caused by link failure.

#### **Features:**

- Auto negotiation of 10/100Mbps and auto MID/MID-X for TX port
- Provide switch configuration of Half-Duplex / Full-Duplex transfer mode for FX port
- Link Fault Passthrough and Far End Fault minimize the losses caused by link failure timely Adopts WDM technology, transmitting and receiving data on one single fiber
- Extend fiber distance up to 20-60km
- Easy-to-view LED indicators provide status to monitor network activity easily

## specifications:

Standards and Protocols	IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x		
Basic Function	Half/Full-Duplex transfer mode for FX port Full Duplex Flow Control (IEEE 802.3x)3 Half Duplex Flow Control (Backpressure) Extends fiber distance up to 20km Link Fault Passthrough and Far End Fault minimize the losses caused by link failure timely		
Ports	1 100M SC port 1 100M RJ45 port (Auto MDI/MDIX)		
WDM	TX: 1550nm RX: 1310nm		
Network Media	<ul> <li>10BASE-T: UTP category 3, 4, 5 cable (maximum 100m)</li> <li>EIA/TIA-568 100Ω STP (maximum 100m)</li> <li>100BASE-T: UTP category 5, 5e cable (maximum 100m)</li> <li>EIA/TIA-568 100Ω STP (maximum 100m)</li> <li>100BASE-FX: Single-mode Fiber</li> </ul>		
LED Indicators	PWR, FDX/Col, LINK/Act, SPD		
Safety & Emission	FCC, CE		
Dimensions (W*D*H)	3.7*2.9*1.1 in. (94.5*73.0*27.0 mm)		
Environment	Operating Temperature: 0°C~40°C (32°F~104°F) Storage Temperature: -40°C~70°C (-40°F~158°F) Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~90% non-condensing		
Power Supply	External Power Adapter		

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#### **MC112CS**

The MC112CS is a media converter designed to convert 100BASE-FX fiber to 100Base-TX copper media or vice versa. It's designed for use with single-mode fiber cable utilizing the SC-Type connector. Adopting WDM technology, MC112CS takes only one fiber to transmit and receive data, which saves you half of the cabling cost. On this fiber, it works at 1550nm on transferring data and at 1310nm on receiving data. So the other end device cooperating with the MC112CS will work at 1310nm on transferring data and at 1550nm on receiving data. Another of TP-LINK's media converters, the MC111CS is just one example of potential devices with which to cooperate with the MC111CS. Moreover, MC112CS can work as a stand alone device (no chassis required) or with TP-LINK's 19" system chassis, and is equipped with Link Fault Pass-through which minimizes losses caused by link failure.

#### **Features:**

- Auto negotiation of 10/100Mbps and auto MID/MID-X for TX port
- Provide switch configuration of Half-Duplex / Full-Duplex transfer mode for FX port
- Link Fault Passthrough and Far End Fault minimize the losses caused by link failure timely Adopts WDM technology, transmitting and receiving data on one single fiber
- Extend fiber distance up to 20-60km
- Easy-to-view LED indicators provide status to monitor network activity easily

## specifications:

Standards and Protocols	IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x		
Basic Function	Half/Full-Duplex transfer mode for FX port Full Duplex Flow Control (IEEE 802.3x)3 Half Duplex Flow Control (Backpressure) Extends fiber distance up to 20km Link Fault Passthrough and Far End Fault minimize the losses caused by link failure timely		
Ports	1 100M SC port 1 100M RJ45 port (Auto MDI/MDIX)		
WDM	TX 1310nm RX 1550nm		
Network Media	<ul> <li>10BASE-T: UTP category 3, 4, 5 cable (maximum 100m)</li> <li>EIA/TIA-568 100Ω STP (maximum 100m)</li> <li>100BASE-T: UTP category 5, 5e cable (maximum 100m)</li> <li>EIA/TIA-568 100Ω STP (maximum 100m)</li> <li>100BASE-FX: Single-mode Fiber</li> </ul>		
LED Indicators	PWR, FDX/Col, LINK/Act, SPD		
Safety & Emission	FCC, CE		
Dimensions (W*D*H)	3.7*2.9*1.1 in. (94.5*73.0*27.0 mm)		
Environment	Operating Temperature: 0°C~40°C (32°F~104°F) Storage Temperature: -40°C~70°C (-40°F~158°F) Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~90% non-condensing		
Power Supply	External Power Adapter		

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Туре	Connector	Transmission Distance	Transmission Media	Output Center Wavelength
MC100CM	RJ45SC	2km	Multi-mode Fiber,Cat-5	1310nm
MC110CS-20	RJ45SC	20km	Single-mode Fiber,Cat-5	1310nm
MC110CS-40	RJ45SC	40km	Single-mode Fiber,Cat-5	1310nm
MC110CS-60	RJ45SC	60km	Single-mode Fiber,Cat-5	1310nm
MC111CS-20	RJ45SC	20km	Single-mode Fiber,Cat-5	1550nmTX/1310nmRX
MC111CS-40	RJ45SC	40km	Single-mode Fiber,Cat-5	1550nmTX/1310nmRX
MC111CS-60	RJ45SC	60km	Single-mode Fiber,Cat-5	1550nmTX/1310nmRX
MC112CS-20	RJ45SC	20km	Single-mode Fiber,Cat-5	1310nmTX/1550nmRX
MC112CS-40	RJ45SC	40km	Single-mode Fiber,Cat-5	1310nmTX/1550nmRX
MC112CS-60	RJ45SC	60km	Single-mode Fiber,Cat-5	1310nmTX/1550nmRX

#### More information of the 1000M series Media Converter

Model NO.	Interface	Transmission Distance	Transmission Media	Output Center Wavelength
MC200CM	RJ45SC	0.55km(50/125um), 0.22km(62.5/125um)	Multi-mode Fiber,TP	850nm
MC210CS	RJ45SC	15km	Single-mode Fiber,TP	1310nm
MC220L	RJ45LC	0.55km /10km	Multi/Single-mode Fiber, TP	850nm/1310nm

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