

# Simple and Reliable Way to Overcome the Distance Limitations

Media Converters and SFP/SFP+ Modules

Surveillance | Enterprise | Factory | Park |  
WISP | Machine Room | and More



# Simple and Reliable Way to Overcome the Distance Limitations

TP-Link offers 100 Mbps and 1000 Mbps media converters to realize reliable network connections, making the long-distance network deployments of surveillance cameras in businesses, factories, and parks simpler.

## Flexible Selections of Distance and Speed

A wide range of media converters are available, offering different maximum transmission distances of between 2 km to 20 km. Different speeds provide flexible deployment options.

## Cost Effective Solution with WDM\*

WDM (Wave Division Multiplexing) technology enables you to transmit and receive data over one single fiber strand instead of two.

## Stable Network Transmission

The stability of fiber transmission guarantees our stable monitoring of sensitive areas and point-to-point connections.

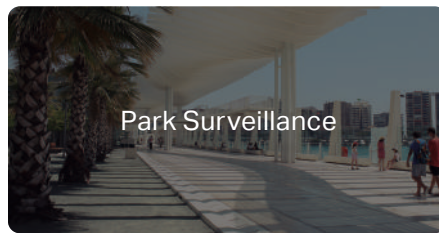
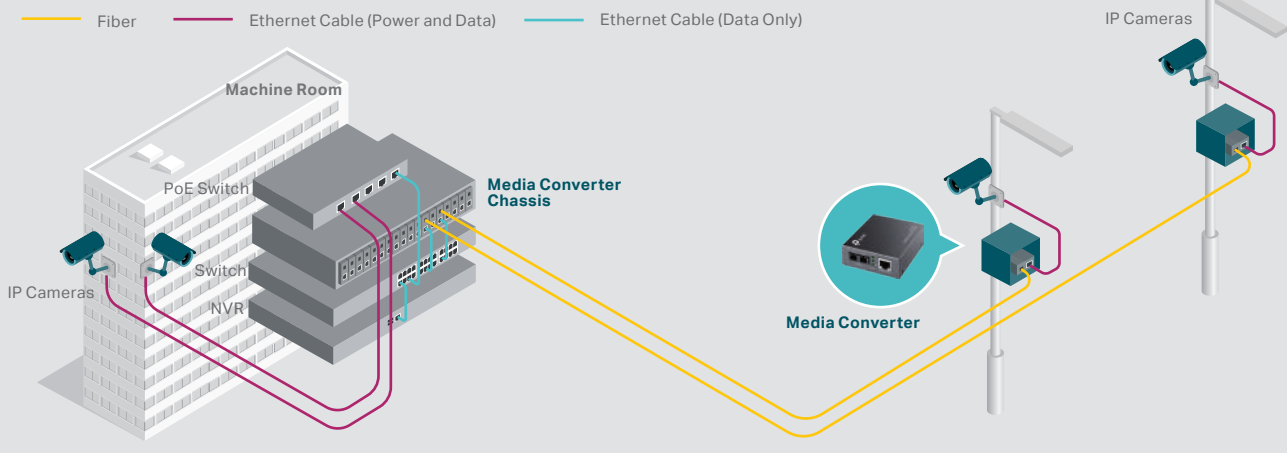
## Innovative Combination of PoE and Fiber\*\*

The PoE output port of media converter provides a direct data and power connection to the IP camera, making remote camera deployment easier and more convenient.

## 100 Mbps Media Converters Benefit Flexible Surveillance

TP-Link Fast Ethernet Media Converters are designed to address the needs of flexible long-range surveillance deployment with optical fibers. It provides an economical path towards extending the distance of an existing network.

### Ideal for Flexible Surveillance Deployment



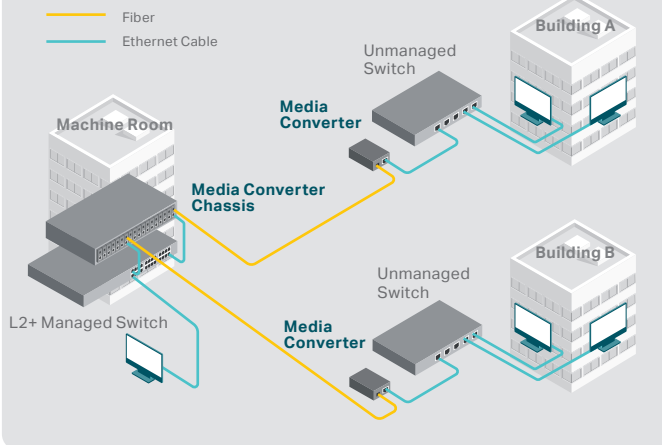
### TP-Link 100 Mbps Media Converters at a Glance

Product Picture							
<b>Model</b>	MC100CM	MC110CS	MC111CS	MC112CS	TL-FC111A-20	TL-FC111B-20	TL-FC111PB-20
<b>Power Input</b>	9V/0.6A				5V/0.6A		48V/0.5A
<b>Fiber Ports</b>	2× 100 Mbps SC Fiber Ports		1× 100 Mbps SC Fiber Port		1× 100 Mbps SC Fiber Port		
<b>Copper Ports</b>	1× 10/100 Mbps RJ45 Port				1× 10/100 Mbps RJ45 Port		1× 10/100 Mbps RJ45 PoE Port
<b>Transmission Distance</b>	2 km		20 km		20 km		
<b>Fiber Type</b>	Multi-Mode		Single-Mode		Single-Mode		
<b>Fiber Number</b>	Dual Fibers		Single Fiber		Single Fiber		
<b>Wave Length</b>	1310 nm		TX: 1550 nm RX: 1310 nm		TX: 1550 nm RX: 1310 nm		TX: 1310 nm RX: 1550 nm
<b>Dimensions (W × D × H)</b>	3.7×2.9×1.1 in (94.5×73.0×27.0 mm)						
<b>Operating Temperature</b>	0–40 °C (32–104 °F)				0–50 °C (32–122 °F)		
<b>Environment</b>	Storage Temperature: -40–70 °C (-40–158 °F) Operating Humidity: 10–90% RH Non-Condensing; Storage Humidity: 5–90% RH Non-Condensing						

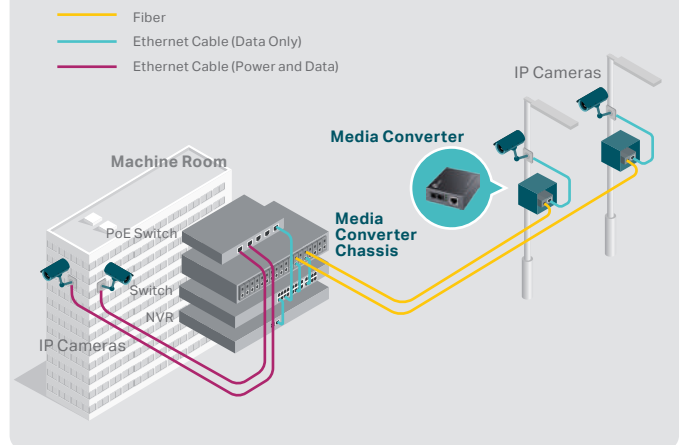
# Gigabit Media Converters—Long-Range Connections with Fiber

TP-Link Gigabit Media Converters easily extend the distance of an existing gigabit network. Long-range point-to-point connections are easily built with the gigabit fiber converters, making them ideal for connecting the network in another building, remote surveillance system, and automated factory equipment.

## Fiber Connections between Enterprises



## Fiber Connections for Surveillance System



## TP-Link Gigabit Media Converters at a Glance

Product Picture							
<b>Model</b>	MC200CM	MC210CS	MC220L	TL-FC311A-2	TL-FC311B-2	TL-FC311A-20	TL-FC311B-20
<b>Power Input</b>	9V/0.6A			5V/0.6A			
<b>Fiber Ports</b>	2 × 100/1000 Mbps SC Fiber Ports		1 × Gigabit SFP Port	1 × 100/1000 Mbps SC Fiber Port			
<b>Copper Ports</b>	1 × 10/100/1000 Mbps RJ45 Port			1 × 10/100/1000 Mbps RJ45 Port			
<b>Transmission Distance</b>	550 m	20 km	Depends on the used SFP module	2 km		20 km	
<b>Fiber Type</b>	Multi-Mode	Single-Mode		Single-Mode			
<b>Fiber Number</b>	Dual Fibers			Single Fiber			
<b>Wave Length</b>	850 nm	1310 nm		TX: 1550 nm RX: 1310 nm	TX: 1310 nm RX: 1550 nm	TX: 1550 nm RX: 1310 nm	TX: 1310 nm RX: 1550 nm
<b>Dimensions (W × D × H)</b>	3.7×2.9×1.1 in (94.5×73.0×27.0 mm)						
<b>Operating Temperature</b>	0–40 °C (32–104 °F)			0–50 °C (32–122 °F)			
<b>Environment</b>	Storage Temperature: -40–70 °C (-40–158 °F) Operating Humidity: 10–90% RH Non-Condensing; Storage Humidity: 5–90% RH Non-Condensing						

## Power Chassis—Ensure the Scalability of Installation



TL-MC1400

- Up to 14 Media Converter Units
- 9 VDC / 0.6 A Power Output
- Redundant Power Supply
- Hot-Swappable
- Mounted Two Cooling Fans for Better Ventilation



TL-FC1420

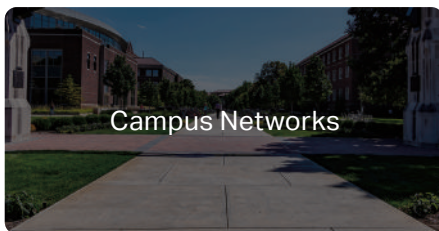
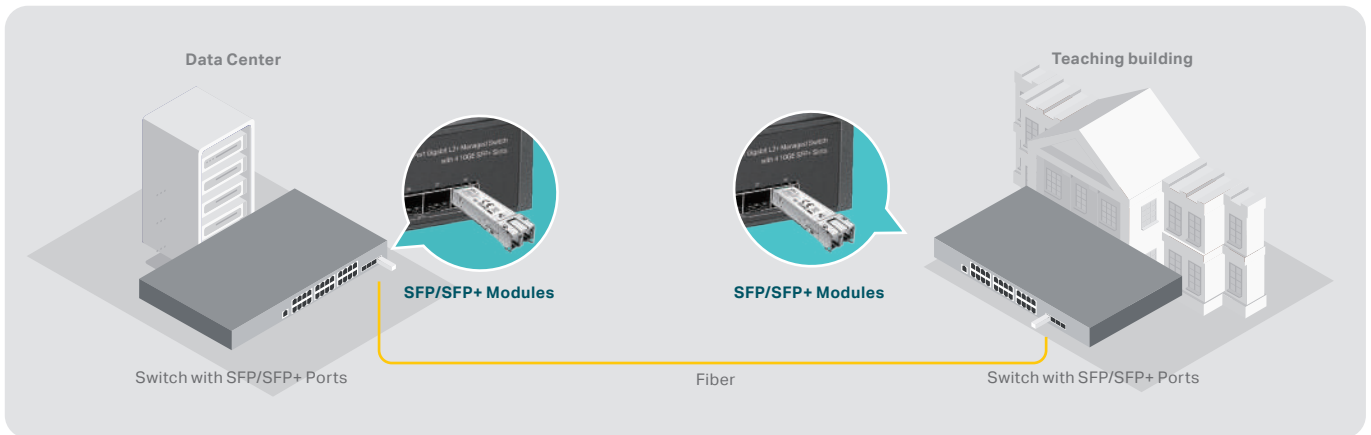
- Up to 14 Media Converter Units
- 5 VDC / 0.6 A Power Output
- Redundant Power Supply
- Hot-Swappable
- Fanless

\*Certain media converters are equipped with WDM technology and use single fiber to transmit and receive data.

\*\*Only TL-FC111PB-20 is equipped with PoE output port.

# SFP/SFP+ Modules—High-Speed Fiber Connections

TP-Link offers a variety of fiber modules to suit your fiber connectivity applications. Multi-mode and single-mode modules with 1000Base SFP or 10GBase SFP+ ports are available, ideal for linking enterprise fiber networks, campus fiber networks, ISP networks, and more.



## TP-Link SFP/SFP+ Modules at a Glance

Product Picture								
Model	TL-SM311LM	TL-SM311LS	TL-SM321A-2	TL-SM321B-2	TL-SM321A	TL-SM321B	TL-SM5110-LR	TL-SM5110-SR
Data Rate	1.25 Gbps						10 Gbps	
Fiber Ports	LC/UPC Duplex			LC/UPC Simplex			LC/UPC Duplex	
Transmission Distance	550 m	20 km	2 km		20 km		10 km	300 m
Fiber Type	Multi-Mode	Single-Mode	Single-Mode			Single-Mode	Multi-Mode	
Fiber Number	Dual Fibers		Single Fiber					
Wave Length	850 nm	1310 nm	TX: 1550 nm RX: 1310 nm	TX: 1310 nm RX: 1550 nm	TX: 1550 nm RX: 1310 nm	TX: 1310 nm RX: 1550 nm	1310nm	850nm
Operating Temperature	0–70 °C (32–158 °F)							
Environment	Storage Temperature: -40–85 °C (-40–185 °F); Operating Humidity: 10–90% RH Non-Condensing; Storage Humidity: 5–90% RH Non-Condensing							

## Reliable and Professional Quality Assurance



### Continuous Innovations

Independent research and development.



### Vertical Integration

In-house manufacturing maintains the quality of every component.



### High-Level Manufacturing

Decades of experience combined with high-tech supporting facilities.



### Complete Quality Control

Develops, builds, crafts and sells products from start to finish, running rigorous whole-process quality-control tests.