Simple and Reliable Way to Overcome the Distance Limitations

Media Converters and SFP/SFP+ Modules

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

tp-link

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.
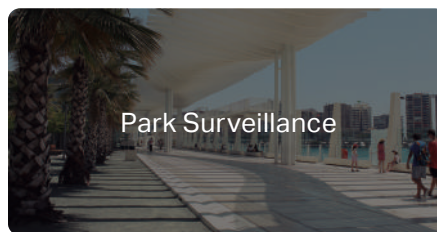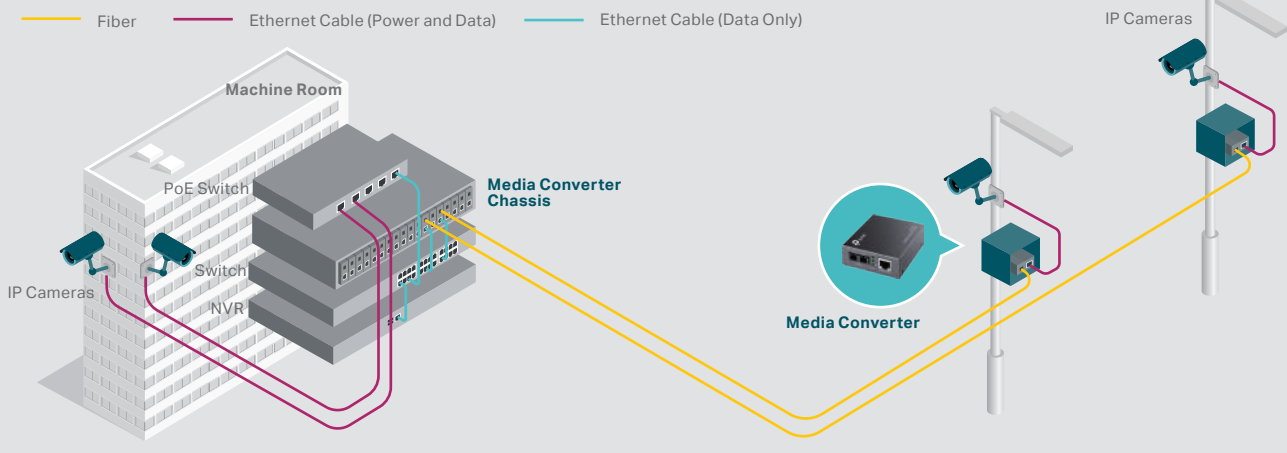
❯ Innovative Combination of PoE and Fiber**

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.

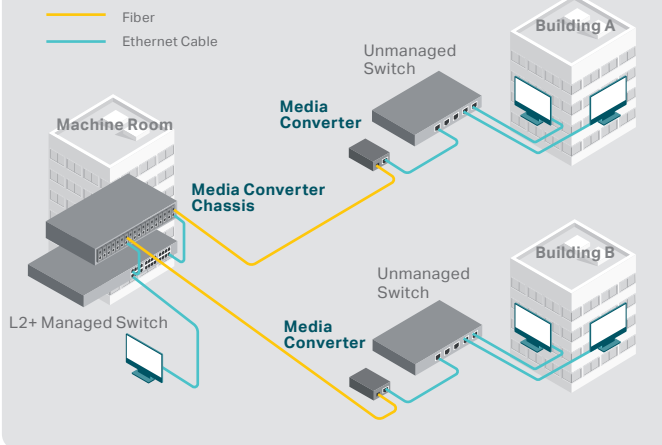### Ideal for Flexible Surveillance Deployment

Fiber —— Ethernet Cable (Power and Data) —— Ethernet Cable (Data Only) ——

IP Cameras

Machine Room

PoE Switch

Media Converter Chassis

Switch

IP Cameras

NVR

Media Converter

Enterprise Surveillance

Park Surveillance

Campus Surveillance

TP-Link 100 Mbps Media Converters at a Glance

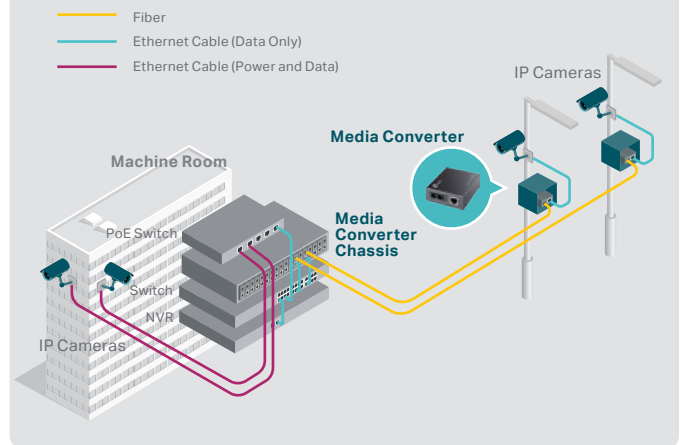|	MC100CM	MC110CS	MC111CS	MC112CS	TL-FC111A-20	TL-FC111B-20	TL-FC111PB-20
Product Picture							
Model	MC100CM	MC110CS	MC111CS	MC112CS	TL-FC111A-20	TL-FC111B-20	TL-FC111PB-20
Power Input	9V/0.6A				5V/0.6A		48V/0.5A
Fiber Ports	2× 100 Mbps SC Fiber Ports		1× 100 Mbps SC Fiber Port		1× 100 Mbps SC Fiber Port		
Copper Ports	1× 10/100 Mbps RJ45 Port				1× 10/100 Mbps RJ45 Port		1× 10/100 Mbps RJ45 PoE Port
Transmission Diatance	2 km	20 km			20 km		
Fiber Type	Multi-Mode	Single-Mode			Single-Mode		
Fiber Number	Dual Fibers		Single Fiber		Single Fiber		
Wave Length	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	TX: 1310 nm RX: 1550 nm
Dimensions (W × D × H)	3.7×2.9×1.1 in (94.5×73.0×27.0 mm)						
Operating Temperature	0–40˚C (32–104˚F)				0–50˚C (32–122˚F)		
Environment	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
— Ethernet Cable

Building A

Unmanaged Switch

Media Converter

Machine Room

Media Converter Chassis

L2+ Managed Switch

Unmanaged Switch

Building B

Media Converter

Fiber Connections for Surveillance System

— Fiber
— Ethernet Cable (Data Only)
— Ethernet Cable (Power and Data)

IP Cameras

Media Converter

Machine Room

PoE Switch

Media Converter Chassis

Switch

NVR

IP Cameras

Enterprise Networks

Manufacturing Equipment

Surveillance Networks

TP-Link Gigabit Media Converters at a Glance

Product Picture							
Model	MC200CM	MC210CS	MC220L	TL-FC311A-2	TL-FC311B-2	TL-FC311A-20	TL-FC311B-20
Power Input	9V/0.6A			5V/0.6A			
Fiber Ports	2 × 100/1000 Mbps SC Fiber Ports		1 × Gigabit SFP Port	1× 100/1000 Mbps SC Fiber Port			
Copper Ports	1× 10/100/1000 Mbps RJ45 Port			1× 10/100/1000 Mbps RJ45 Port			
Transmission Diatance	550 m	20 km	Depends on the used SFP module	2 km		20 km	
Fiber Type	Multi-Mode	Single-Mode		Single-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
Dimensions (W × D × H)	3.7×2.9×1.1 in (94.5×73.0×27.0 mm)						
Operating Temperature	0–40˚C (32–104˚F)			0–50˚C (32–122 ˚F)			
Environment	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
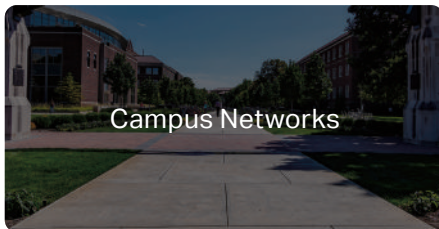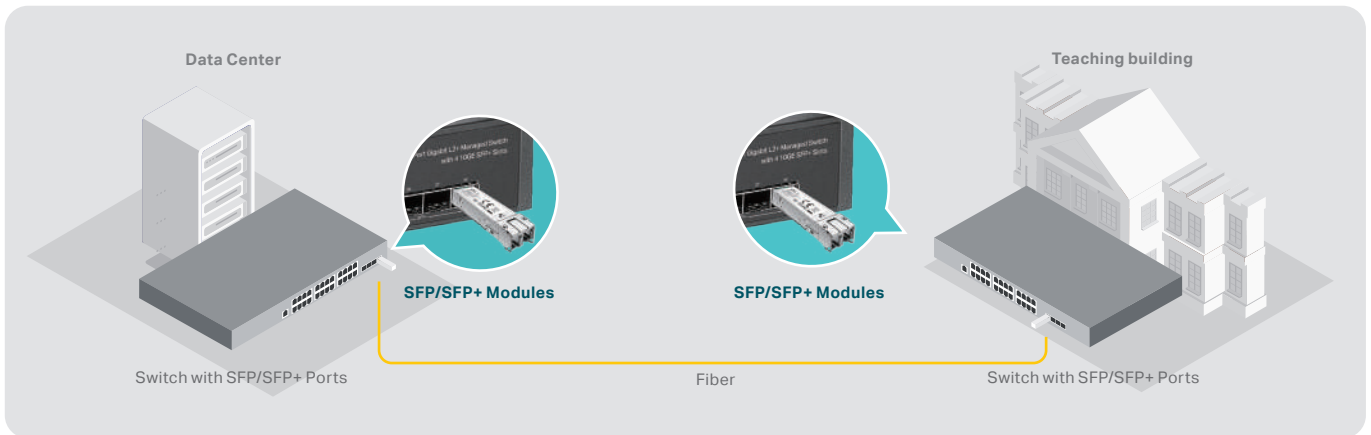• Mounted Two Cooling Fans for Better Ventilation

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.

Data Center — Teaching building
Switch with SFP/SFP+ Ports — SFP/SFP+ Modules — SFP/SFP+ Modules — Fiber — Switch with SFP/SFP+ Ports

Campus Networks

Enterprise Networks

ISP Networks

TP-Link SFP/SFP+ Modules at a Glance

	TL-SM311LM	TL-SM311LS	TL-SM321A-2	TL-SM321B-2	TL-SM321A	TL-SM321B	TL-SM5110-LR	TL-SM5110-SR
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 Diatance	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				Dual Fibers	
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 ℃ (32–158 °F)							
Environment	Storage Temperature: -40–85 ℃ (-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.