

Expand Your Ethernet Network

10G SFP+ Media Converter

MC420L

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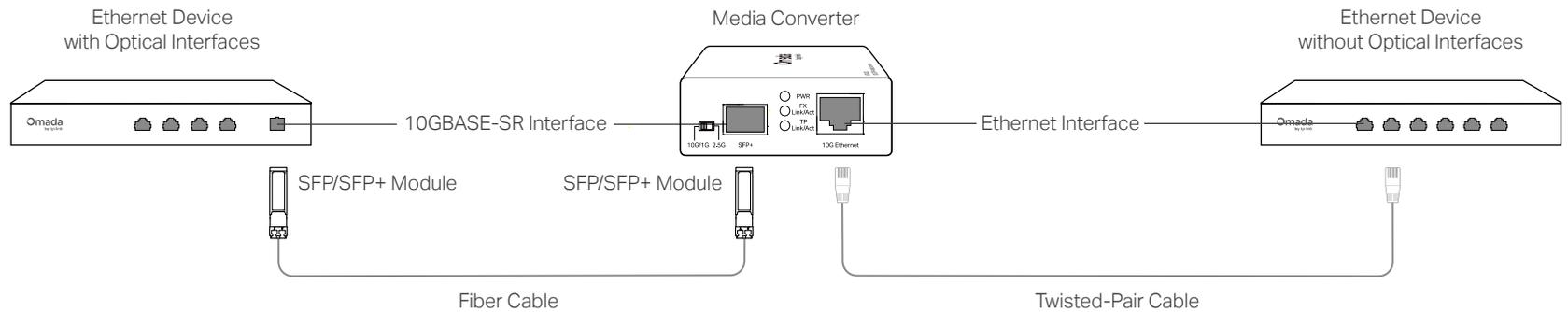
To ask questions, find answers, and communicate with TP-Link users or engineers, please join the TP-Link Community.

For technical support and other information, please visit <https://support.omadanetworks.com/>, or simply scan the QR code.



Package Contents: Media Converter, Power Adapter, User Guide

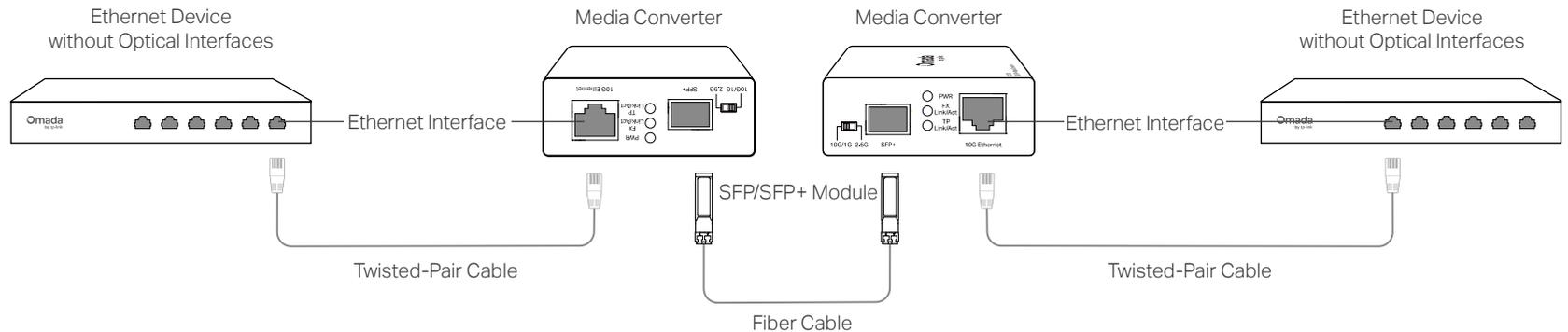
Scenario 1: Connect Devices with and without Optical Interfaces



Note:

1. Using an Omada SFP+ module on the MC420L is recommended, as modules from other vendors may be incompatible.
2. MC420L features a DIP switch for mode selection. The 10G/1G Mode is enabled by default (switch toggled left). To activate the 2.5G Mode, toggle the switch to the right.
3. When using the 1G SFP module, you might have to manually set the edge device connected to the Ethernet port to a rate of 1 Gbps.

Scenario 2: Connect Devices without Optical Interfaces

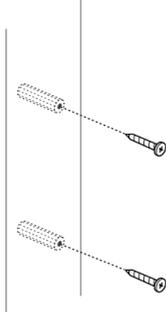


Note:

Two converters with a pair of SFP/SFP+ modules can work cooperatively.

Wall-Mounting Installation

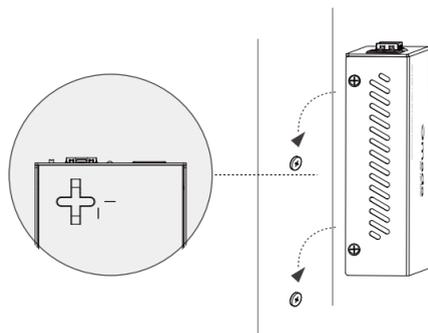
1 Drill two holes in the wall and insert screws (not provided in the package) into the holes.



Screw Specifications

Screw Standard of ANSI B1.1	#4, #6, #8
Minimum Length	7mm
Screw-Head-to-Wall Minimal Distance	1.5mm
Wall-Mounting Holes Distance	57.5mm

2 Attach the media converter to the mounting bracket by sliding the adapter in the direction of the arrows until it locks into place.



Specifications

General Specifications

Standards	IEEE 802.3, IEEE 802.3ab, IEEE 802.3bz, IEEE 802.3an, IEEE802.3z, IEEE802.3ae, IEEE802.3x
LED	PWR, FX Link/Act, TP Link/Act
Interface	SFP+ port, RJ-45 jack
Twisted-Pair	1000BASE-T/2.5GBASE-T/5GBASE-T: 4-pair UTP/STP of Cat. 5e or above (maximum 100m) 10GBase-T: 4-pair UTP of Cat. 6 (maximum 55m), 4-pair UTP of Cat. 6a (maximum 100m), or 4-pair STP of Cat. 6 or above (maximum 100m)
Fiber & Wave Length	Depends on the used SFP/SFP+ module
Power	External Power Adapter: 9W/0.6A

Environmental and Physical Specifications

Operation Temperature	0 °C to 50 °C (32 °F to 122 °F)
Storage Temperature	-40 °C to 70 °C (-40 °F to 158 °F)
Operation Humidity	10% to 90%RH non-condensing
Storage Humidity	5% to 90%RH non-condensing

LED Explanation

	PWR
	On: Power on Off: Power off
	Link/Act
Solid Green	10G/1G Mode: SFP+ port linked at 10 Gbps 2.5G Mode: SFP+ port linked at 2.5 Gbps
FX Solid Yellow	10G/1G Mode: SFP+ port linked at 1 Gbps 2.5G Mode: SFP+ port linked at 1 Gbps
Flashing	SFP+ port is transmitting or receiving data
Off	SFP+ port not linked
Solid Green	10G/1G Mode: RJ45 port linked at 10 Gbps 2.5G Mode: RJ45 port linked at 2.5 Gbps
TP Solid Yellow	10G/1G Mode: RJ45 port linked at 1G/2.5G/5 Gbps 2.5G Mode: RJ45 port linked at 1 Gbps
Flashing	RJ45 port is transmitting or receiving data
Off	RJ45 port not linked

FAQ

Is the media converter compatible with a 2.5G SFP module?

A: Yes. Before inserting the SFP module, make sure you toggle the DIP switch to the 2.5G Mode. In this mode, the media converter supports the IEEE 802.3bz and 2500Base-X protocols. You may need to adjust the rate of the edge device to 2.5 Gbps manually.

Safety Information

- Keep the device away from water, fire, humidity or hot environments.
- Do not attempt to disassemble, repair, or modify the device. If you need service, please contact us.
- Do not use damaged charger or USB cable to charge the device.
- Do not use any other chargers than those recommended.
- Adapter shall be installed near the equipment and shall be easily accessible.
- Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not point or stare directly into the beam or into the optical port of the transceiver when it is operating, as this can injure your eyesight.
- Use only power supplies which are provided by manufacturer and in the original packing of this product. If you have any questions, please don't hesitate to contact us.

FCC STATEMENT

Product Name: **10G SFP+ Media Converter**
Model Number: MC420L

Component Name	Model
Power Adapter	T090060-2B1

Responsible party:

TP-Link Systems Inc.

Address: 10 Mauchly, Irvine, CA 92618

Website: <https://www.tp-link.com/us/>

Tel: +1 626 333 0234

Fax: +1 909 527 6804

E-mail: sales.usa@tp-link.com

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) This device may not cause harmful interference.

2) This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Product Name: Power Adapter

Model Number: T090060-2B1

Responsible party:

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Address: 10 Mauchly, Irvine, CA 92618

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This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

We, TP-Link Systems Inc., has determined that the equipment shown as above has been shown to comply with the applicable technical standards, FCC part 15. There is no unauthorized change is made in the equipment and the equipment is properly maintained and operated.

Issue Date: 2025-01-14

Industry Canada Statement

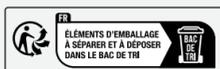
CAN ICES-3 (A)/NMB-3(A)

CE Mark Warning

This is a class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.



Продукт сертифіковано згідно з правилами системи УкрСЕПРО на відповідність вимогам нормативних документів та вимогам, що передбачені чинними законодавчими актами України.



BSMI Notice

安全諮詢及注意事項

- 請使用原裝電源供應器或只能按照本產品注明的電源類型使用本產品。
- 清潔本產品之前請先拔掉電源線。請勿使用液體、噴霧清潔劑或濕布進行清潔。
- 注意防潮，請勿將水或其他液體潑灑到本產品上。
- 插槽與開口供通風使用，以確保本產品的操作可靠並防止過熱，請勿堵塞或覆蓋開口。
- 請勿將本產品置放於靠近熱源的地方。除非有正常的通風，否則不可放在密閉位置中。
- 請不要私自拆開機殼或自行維修，如產品有故障請與原廠或代理商聯繫。
- 警告：為避免電磁干擾，本產品不應安裝或使用於住宅環境。

限用物質含有情況標示聲明書

產品元件名稱	限用物質及其化學符號					
	鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr ⁶⁺	多溴聯苯 PBB	多溴二苯醚 PBDE
PCB	○	○	○	○	○	○
外殼	○	○	○	○	○	○
電源供應器	-	○	○	○	○	○
其他及其配件	-	○	○	○	○	○

備考1: "○"係指該項限用物質之百分比含量未超出百分比含量基準值。

備考2: "-"係指該項限用物質為排除項目。



EU declaration of conformity

TP-Link hereby declares that the device is in compliance with the essential requirements and other relevant provisions of directives 2014/30/EU, 2014/35/EU, 2011/65/EU and (EU)2015/863.

The original EU declaration of conformity may be found at <https://www.tp-link.com/en/support/ce/>

UK declaration of conformity

TP-Link hereby declares that the device is in compliance with the essential requirements and other relevant provisions of the Electromagnetic Compatibility Regulations 2016 and Electrical Equipment (Safety) Regulations 2016.

The original UK declaration of conformity may be found at <https://www.tp-link.com/support/ukca/>

Explanation of the symbols on the product label

產品標籤上符號的解釋

Note: The product label can be found at the bottom of the product.

Symbols may vary from products.

注意：產品標籤可在產品底部找到。符號可能因產品而異。

Symbol 符號	Explanation 說明
	Class II equipment 二級設備
	Class II equipment with functional earthing 具有接地功能的二級設備
	Alternating current 交流電
	Direct current DC 電壓
	Polarity of d.c. power connector 輸出端點的極性
	For indoor use only 僅供室內使用
	Dangerous voltage 危險電壓
	Caution, risk of electric shock 請注意，有觸電的危險
	Energy efficiency Marking 能源效率標誌
	Protective earth 保護接地
	Earth 接地
	Frame or chassis 框架或外殼
	Functional earthing 功能接地
	Caution, hot surface 請注意，表面過熱
	Caution 警告
	Operator's manual 操作手冊
	Stand-by 待機
	"ON"/"OFF" (push-push) “開啟” / “關閉” (按壓式)
	Fuse 保險絲
	Fuse is used in neutral N 保險絲用於中性線 N
	RECYCLING 回收 This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment. User has the choice to give his product to a environmental recycling organization or to the retailer when he buys a new electrical or electronic equipment. 這個產品帶有歐盟指令 2012/19/EU 中關於廢棄電氣電子設備 (WEEE) 的選擇性分類標誌。這意味著，該產品必須按照該指令處理，以便進行回收或拆解，從而最大限度地減少對環境的影響。 用戶可以選擇將產品交給有資格的回收機構，或在購買新的電器或電子設備時將其交給零售商進行回收。
	Caution, avoid listening at high volume levels for long periods 請小心，避免長時間以高音量收聽。
	Disconnection, all power plugs 斷線，所有電源插頭
	Switch of mini-gap construction 迷你間隙結構開關
	Switch of micro-gap construction (for US version) Switch of micro-gap / micro-disconnection construction (for other versions except US) 小間隙結構開關 (US 版本) 小間隙 / 小斷開結構的開關 (非 US 版)
	Switch without contact gap (Semiconductor switching device) 無接觸間隙的開關 (半導體開關設備)