

QNAP

[ 新世代 10GbE & 2.5GbE SD-WAN 路由器 ]

# QHora 321/322

NAS 及 IoT 物聯網環境安全連線最佳利器



10GbE  
2.5GbE



# QHora-321/322是一個能替你帶來

- 不用再被router的預設值給限制
- 可全自訂的WAN/LAN跟多port綁定，讓router去符合你的網路需求
- 可大量布建VPN的router
- 更高的port speed讓傳檔更有效率
- 最基本網速是2.5G，QHora-322最高可到10G





進化的  
**QuRouter**  
給使用者更好的  
操作感受

# 更靈活且更直覺的QuRouter

- 將同一功能所需的設定整合在同一頁面
- 可以在同一頁看到設定值跟interface的基本status
- Router不只是router，他也可以透過設定做到類switch功能
- 增加software define routing的多元性

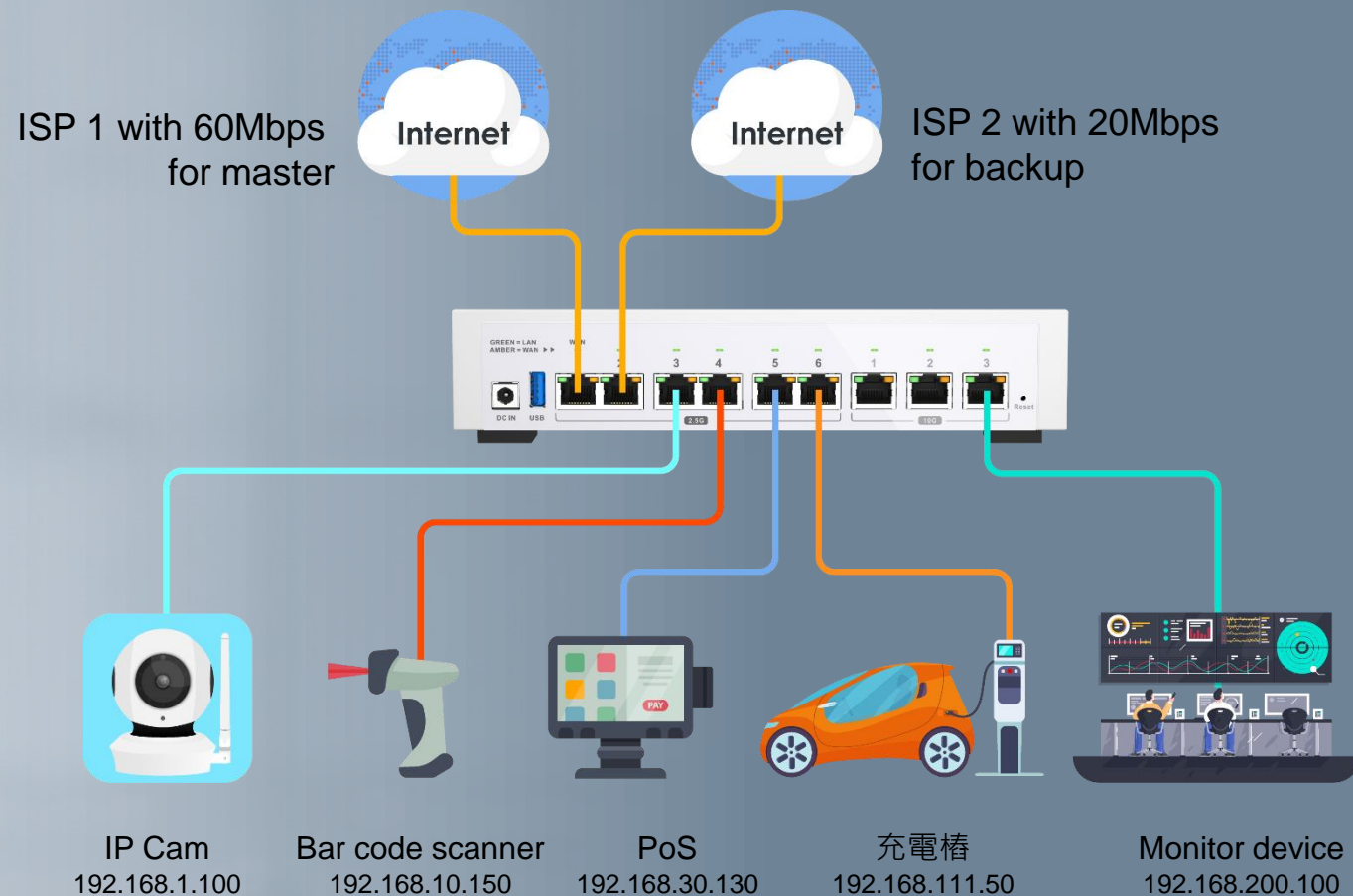


# 靈活的使用 情境搭配



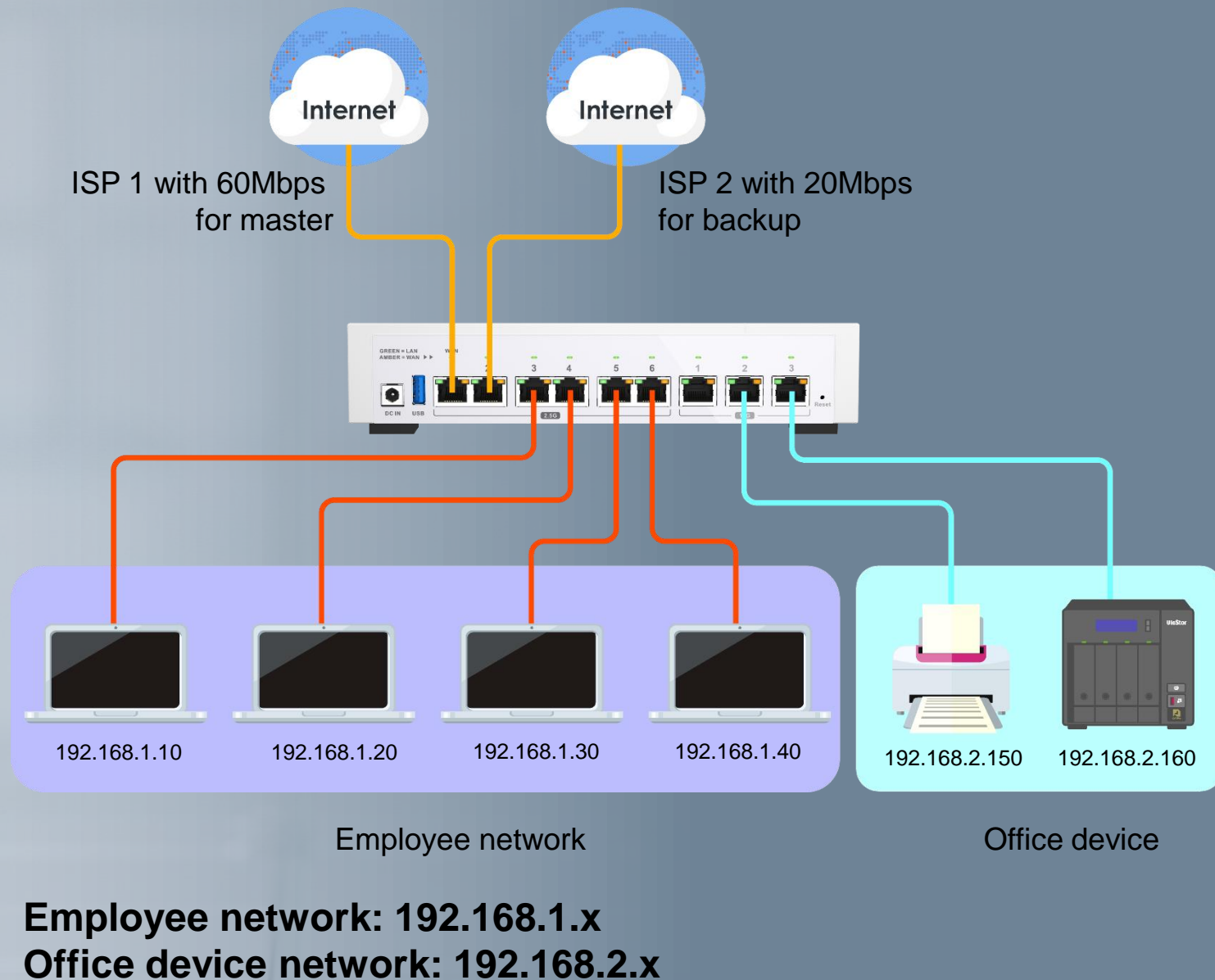
# IoT – Store 多台 edge devices 分屬在互相獨立的網段中

- Edge devices 數量不多，都直連 router 就可
- 因服務不同，各種 IoT 設備須要有彼此獨立的網路
- 只是切開網路且是直連 edge device，故不需 VLAN 跟 Bridge



## SOHO/SB - 多台edge devices 隸屬同一網段，數量少且無wireless不需額外switch跟AP

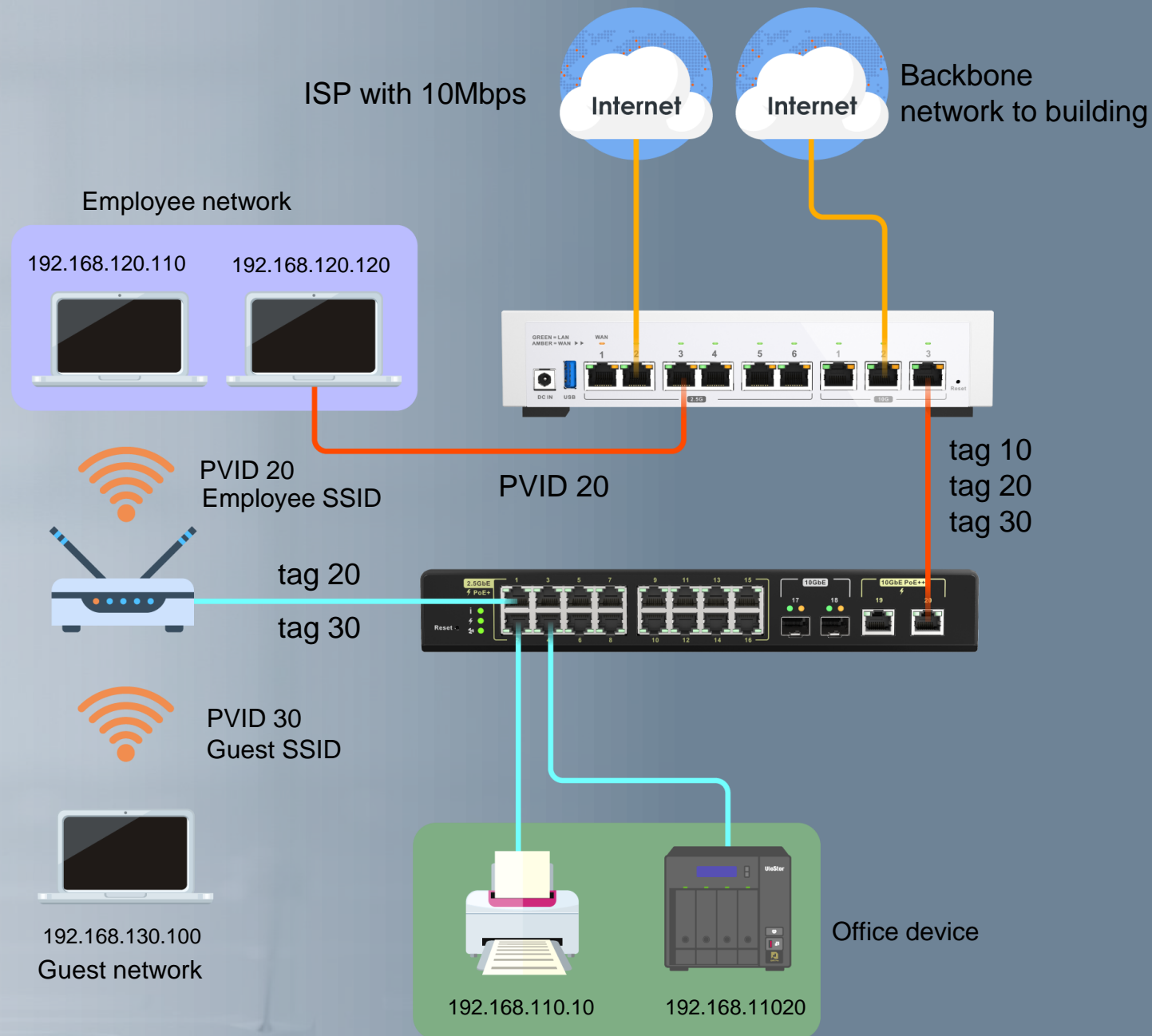
- Edge devices數量不多，都直連router就可
- 需將多個physical interface串成同一個group，共用同一個subnet
- 會有dual wan的布建做備援使用



## SB – 需有員工及訪客網路區隔，且需提供wireless服務

- 需透過VLAN將不同需求的網域做區隔
- 有AP跟guest wifi需求，因此需搭配PoE switch
- 會有dual wan的布建做load balancing及備援使用

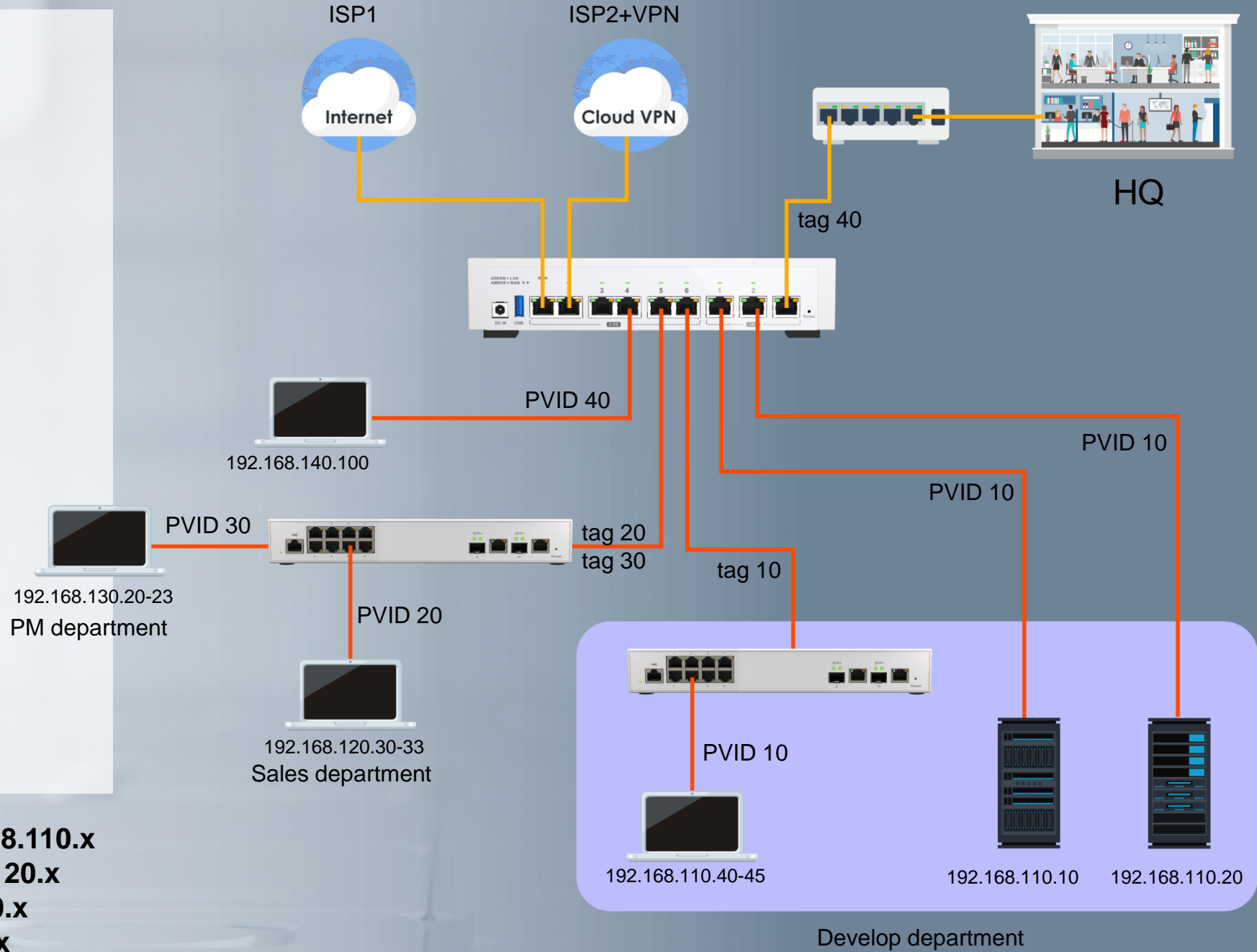
Office device VLAN 10: 192.168.110.x  
Employee network VLAN20: 192.168.120.x  
Guest network VLAN30: 192.168.130.x





# SMB/MB – 分部辦公室布建

- 會有跟HQ的網路，跟分部辦公室網路的串聯、分流及備援需求
- 辦公室部門多需透過VLAN分割，且也需考慮跟HQ網路的整合
- 需有特定的routing management讓特定服務使用

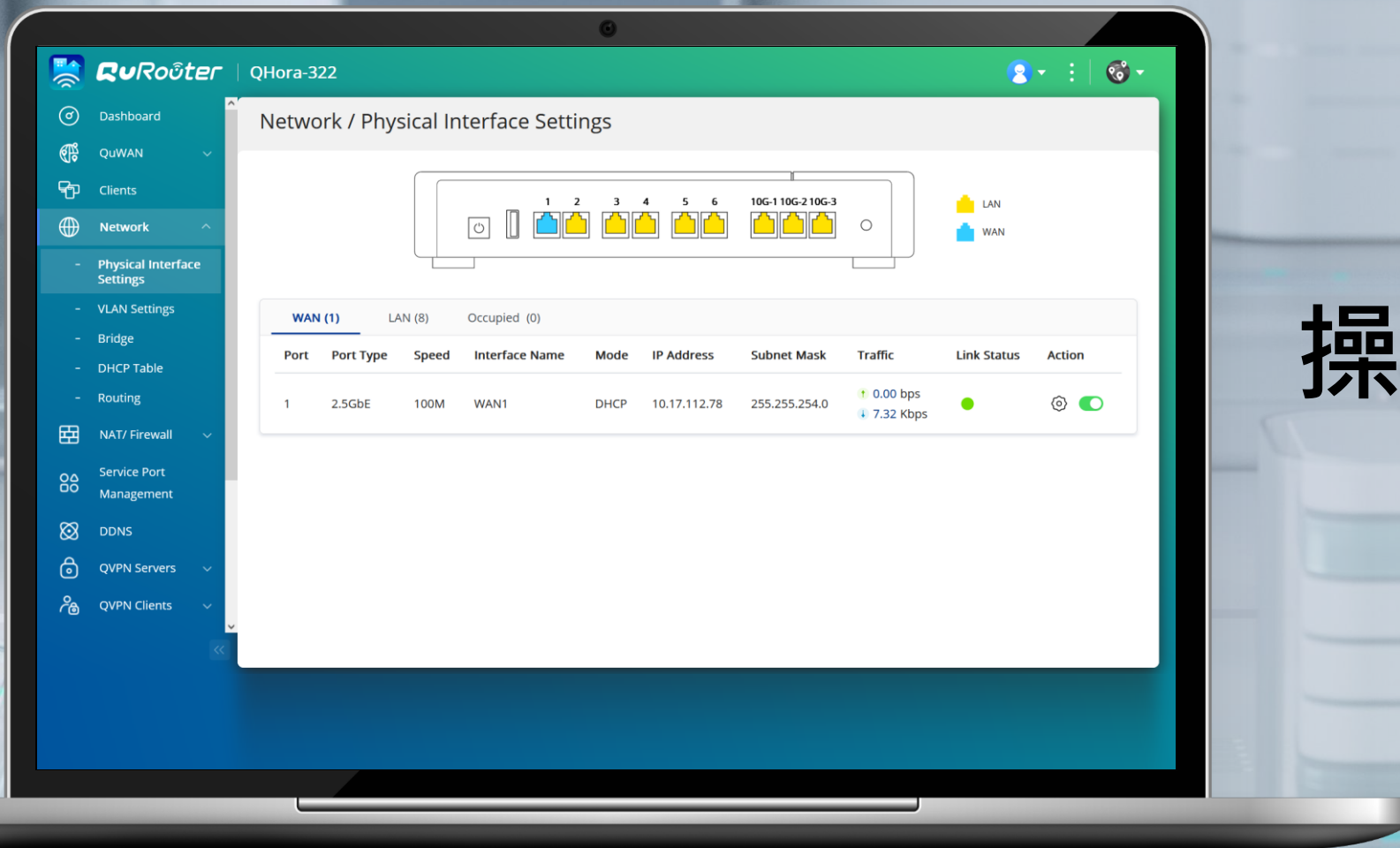


Develop department VLAN10: 192.168.110.x

Sales department VLAN20: 192.168.120.x

PM department VLAN30: 192.168.130.x

IT department VLAN40: 192.168.140.x



# 操作界面示意圖

# Physical interface settings-Dashboard

QuRouter | QHora-322

## Network / Physical Interface Settings

1 2 3 4 5 6 10G-1 10G-2 10G-3

LAN  
WAN

WAN (1) LAN (8) Occupied (0)

Port	Port Type	Speed	Interface Name	Mode	IP Address	Subnet Mask	Traffic	Link Status	Action
1	2.5GbE	100M	WAN1	DHCP	10.17.112.78	255.255.254.0	↑ 0.00 bps ↓ 7.32 Kbps	●	⚙️ <input checked="" type="checkbox"/>

# Physical interface settings-Dashboard(con't)

The screenshot displays the 'Physical Interface Settings' page for a QNAP QHora-322 device. The interface features a navigation menu on the left and a main content area. The main content area includes a diagram of the device's physical interfaces and a table of interface settings.

**Physical Interface Settings**

WAN (1) **LAN (8)** Occupied (0)

Port	Port Type	Speed	Interface Name	IP Address	Subnet Mask	Traffic	Link Status	Action
2	2.5GbE	--	LAN1	192.168.100.1	255.255.255.0	--	●	⚙️ <input checked="" type="checkbox"/>
3	2.5GbE	--	LAN2	192.168.101.1	255.255.255.0	--	●	⚙️ <input checked="" type="checkbox"/>
4	2.5GbE	--	LAN3	192.168.102.1	255.255.255.0	--	●	⚙️ <input checked="" type="checkbox"/>
5	2.5GbE	--	LAN4	192.168.103.1	255.255.255.0	--	●	⚙️ <input checked="" type="checkbox"/>
6	2.5GbE	--	LAN5	192.168.104.1	255.255.255.0	--	●	⚙️ <input checked="" type="checkbox"/>
10G-1	10GbE	--	LAN6	192.168.105.1	255.255.255.0	--	●	⚙️ <input checked="" type="checkbox"/>
10G-2	10GbE	--	LAN7	192.168.106.1	255.255.255.0	--	●	⚙️ <input checked="" type="checkbox"/>

# VLAN setting dashboard

The screenshot displays the QuRouter management interface. A 'VLAN Configuration' dialog box is open, showing settings for a LAN interface. The interface includes a sidebar with navigation options like Dashboard, QuWAN, Clients, Network, Physical Interface Settings, VLAN Settings, Bridge, DHCP Table, Routing, NAT/ Firewall, Service Port Management, DDNS, QVPN Servers, and QVPN Clients. The background shows a 'VLAN Settings' page with an 'Add VLAN' button.

**VLAN Configuration**

Interface: LAN

VLAN ID: (1-4094)

Interface Name:

Description:

MTU: 1500

Port	1	2	3	4	5	6	10G-1	10G-2	10G-3
Tagged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Untagged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**IP Address Assignment**

IPv4 IPv6

Fixed IP address:

Subnet mask: 255.255.255.0 (/24)

Enable Spanning Tree Protocol (STP)

Enable DHCP server service

Apply Cancel

# Bridge setting dashboard

**Bridge**

Interface Name:

Description:

MTU:

Available Interfaces (8)

- LAN1 - Port 2
- LAN2 - Port 3
- LAN3 - Port 4
- LAN4 - Port 5
- LAN5 - Port 6
- LAN6 - Port 10G-1
- LAN7 - Port 10G-2
- LAN8 - Port 10G-3

Members (0)

No data

**⚠ Creating Bridge interface requires minimum 2 ports.**

**IP Address Assignment**

IPv4 | IPv6

Fixed IP address:

Subnet mask:



**QuWAN讓多空間  
的串聯更方便**

# 如何串起多個空間， 在SMB、Chain stores是很重要的議題

## SMB

- 可能會有1-2個辦公室空間需要串連成公司內網
- 辦公室會有像NAS這種高速儲存設備存放公司資料
- 時常會有員工需要遠端連回辦公室，需同時考量遠端連線的安全問題
- 如考慮到WFH，也必須考慮WFH員工連回辦公室的方式

## Chain store

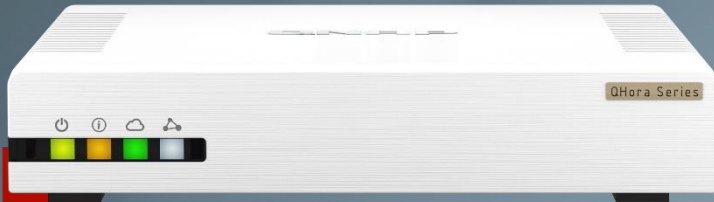
- 多間店面，跟總公司必須隨時保持連線，且必須考量連線的穩定及安全性
- 店面可能網路需求不高，POS系統或者schedule backup資料回總部
- 集中式管理多台設備非常重要
- 總部的設備需考量能多元的布建，有可能需要一台強大運算的設備
- 可能各區域的某一間分店，也會做為區域的節點，幫忙做總公司管理分流





# QHora-321/322的加入讓 QNAP QuWAN router 戰隊更完整

大量SD-WAN多高速網路設備布建

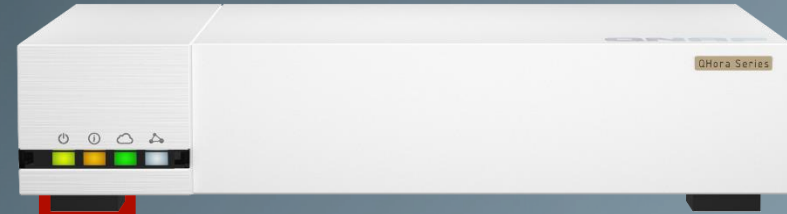


**NEW**

**QHora-321**

6 x 2.5GbE RJ45 + QuWAN solution

單臺SD-WAN多高速網路設備需求



**NEW**

**QHora-322**

3 x 10GbE + 6 x 2.5GbERJ45 +  
QuWAN solution

SD-WAN高速網路及WiFi6布建

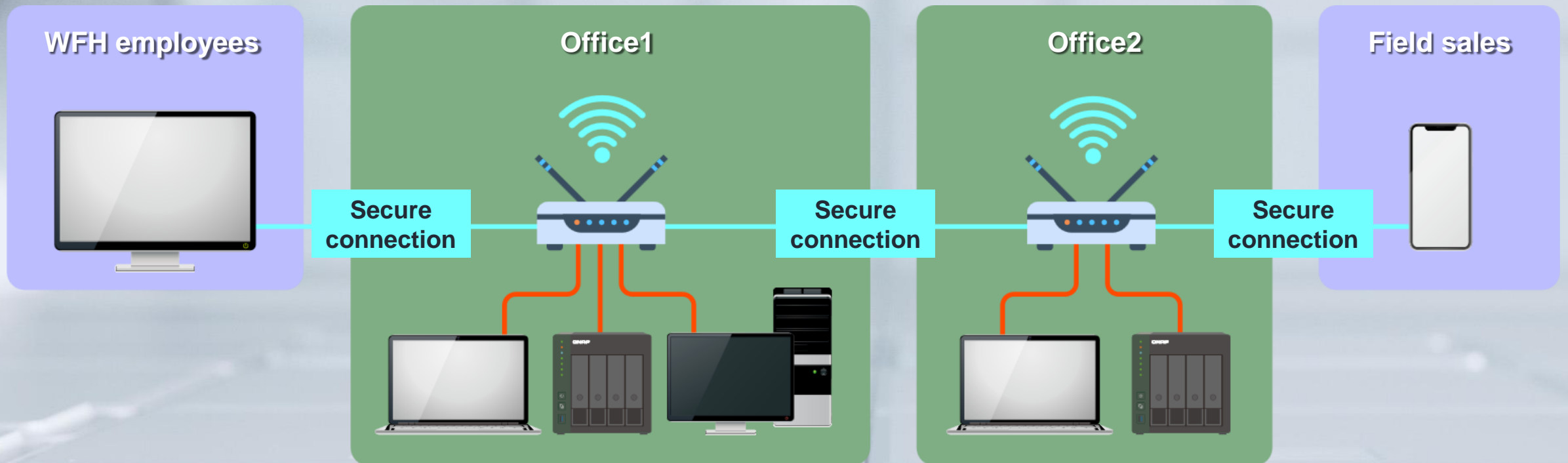


**QHora-301W**

2 x 10GbE + 4 x 1GbE RJ45 +  
QuWAN solution

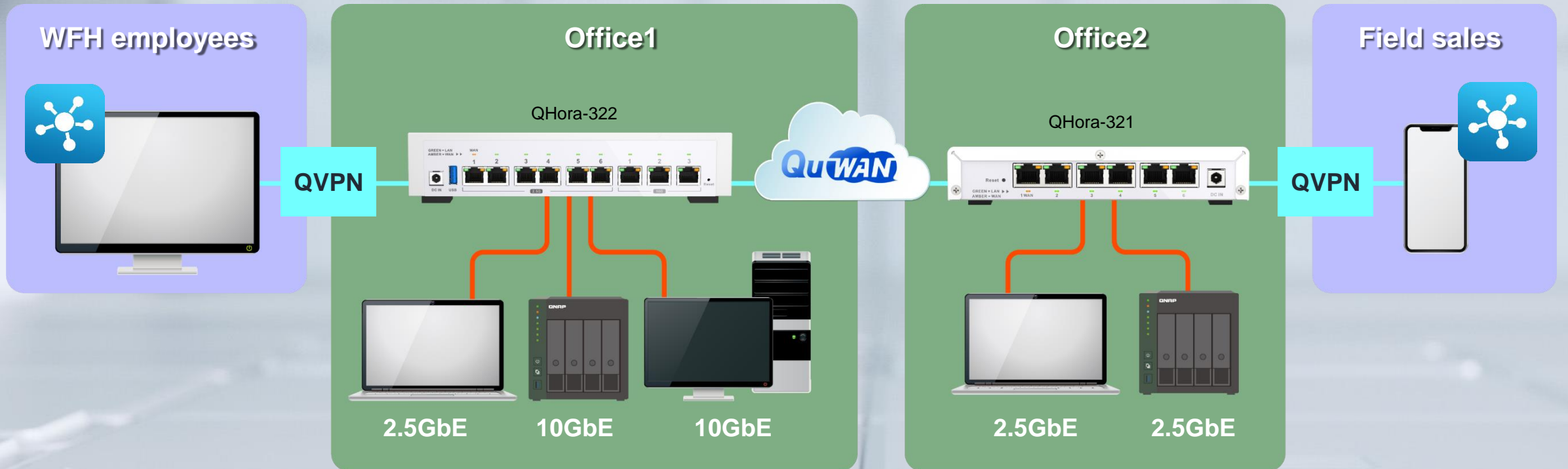
# SMB會有那些環境需求？

- 有加密的安全網路需求，不論各辦公室彼此連線或外網需連回辦公室網路的
- 辦公室網路設備網速提升，必須有相對應的網路設備



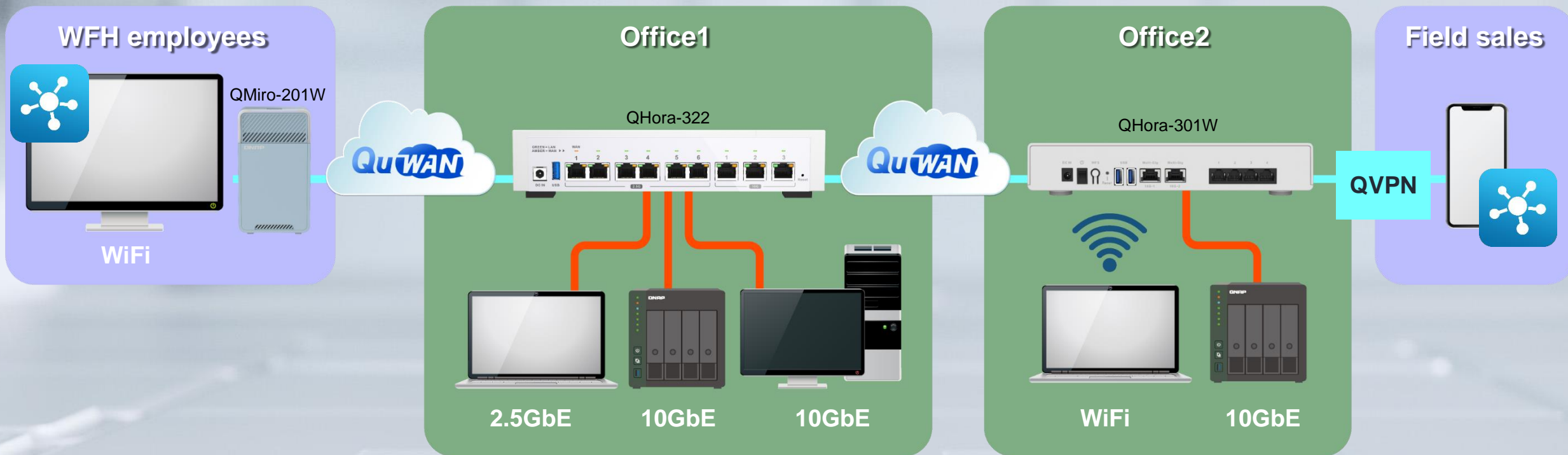
# QHora-321/322的加入可以為SMB帶來什麼變化？

- QuWAN可提供各辦公室自動組網
- WFH或遠端連線需求可透過QVPN協助擴展



# 不同的QuWAN產品讓SMB應用更多元

- 搭配像QHora-301W/QMiro-201W產品，可額外提供WiFi連入的選擇
- 都屬於QuWAN支援的產品，可直接建立QuWAN mesh connection



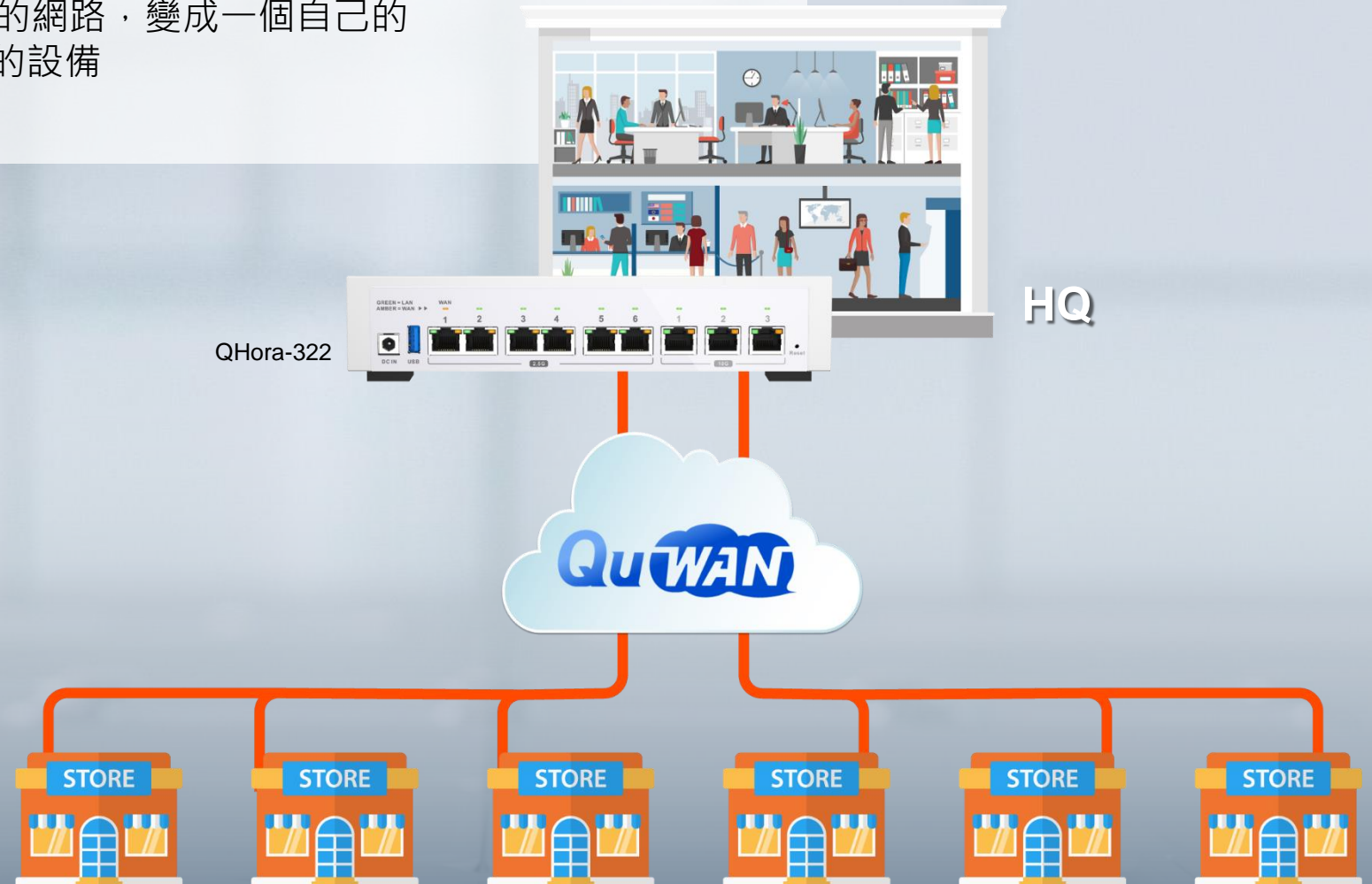
# Chain stores 會有那些環境需求？

- 各分店都必須有加密的安全網路回HQ
- 需要大量布建

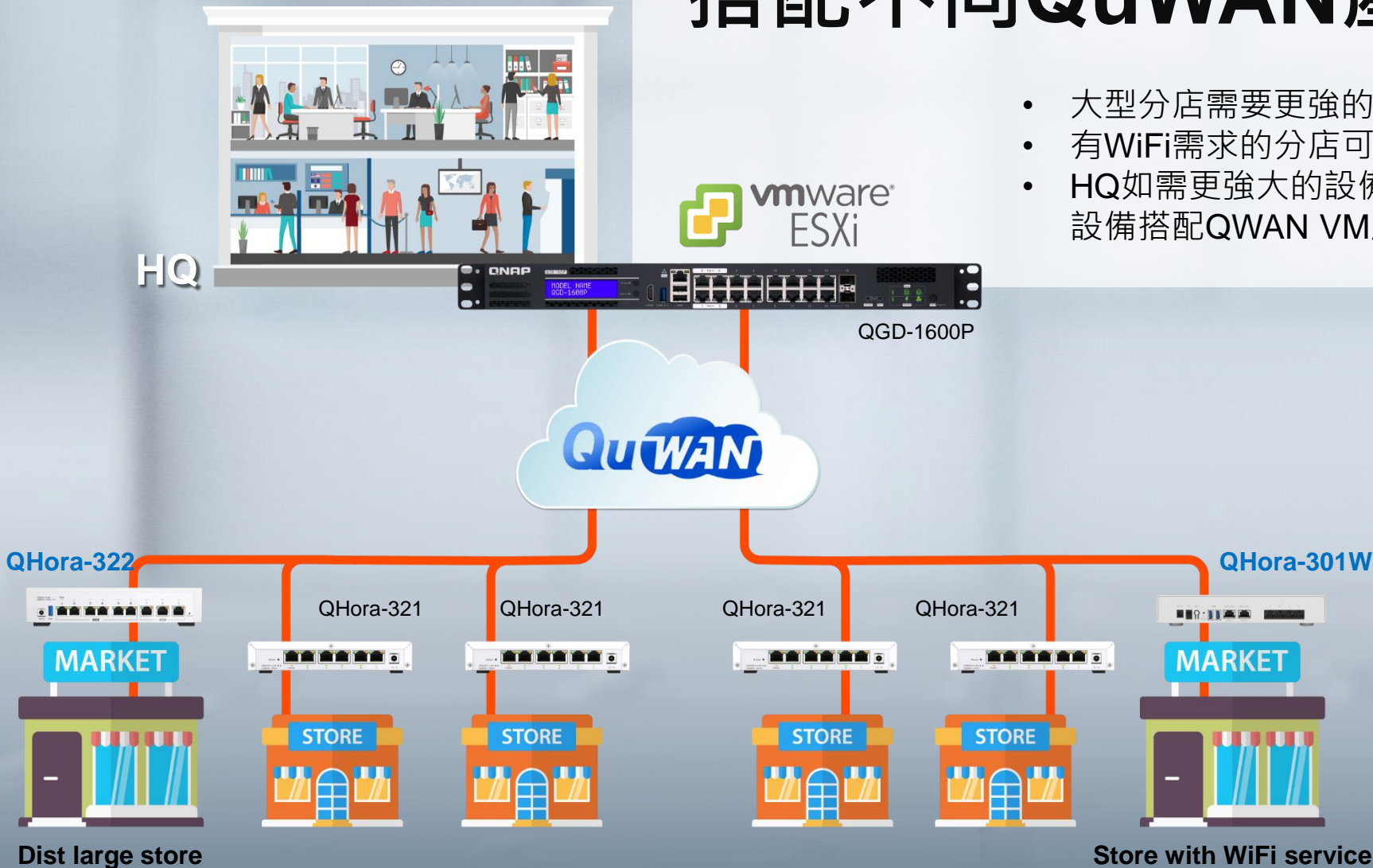


# QHora-321/322的加入可以為 Chain stores帶來什麼變化？

- QuWAN可以直接串連HQ跟各分店的網路，變成一個自己的內網直接從雲端就可管理所有分店的設備
- 分店跟HQ的連線全部經過加密



# 針對特定分店的特別需求，可以 搭配不同QuWAN產品做變化

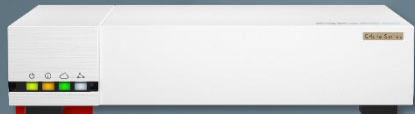


## SMB/SB Router



**NEW**

QHora-321



**NEW**

QHora-322



QHora-301W

# QHora-321/322的加入， 讓QuWAN的平台選擇更加的多元

## Home WiFi mesh router



QMiroPlus-201W



QMiro-201W

## QuWAN vRouter



## QNAP Products support QuWAN



QNAP NAS series



QNAP QGD smart switch series



QNAP QuCPE Virtualization Equipment



# 更多的VPN連線



# QHora-321/322將VPN可連線數推上企業級等級

	QHora-321	QHora-322
可建立QBelt連線數	700	1000
支援QuWAN建立大量使用者帳號	V	V



**QuRouter**



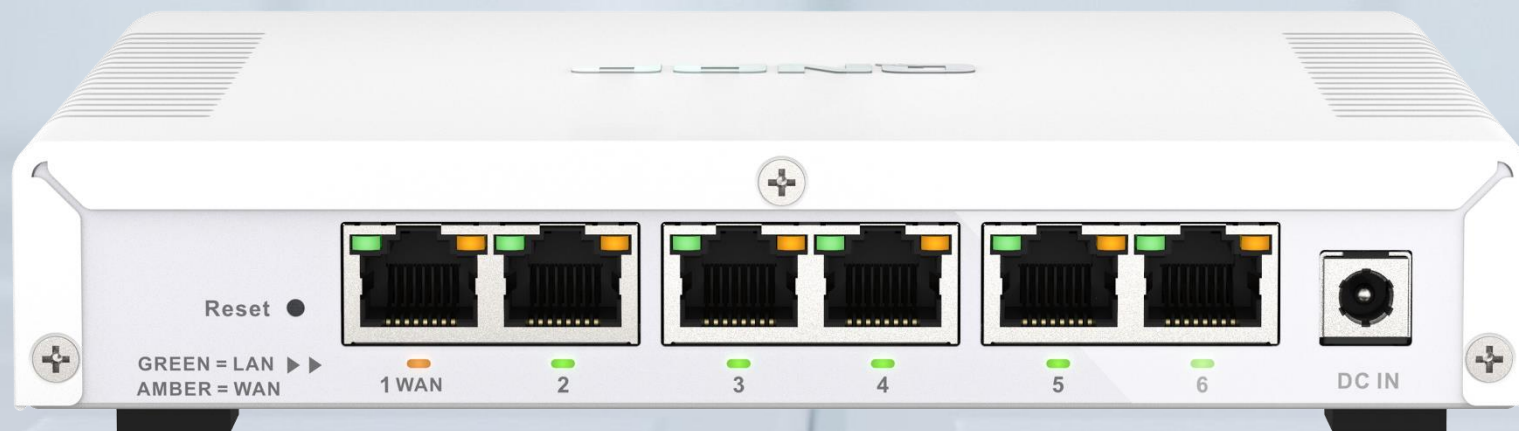
**QVPN**



# HW SPEC

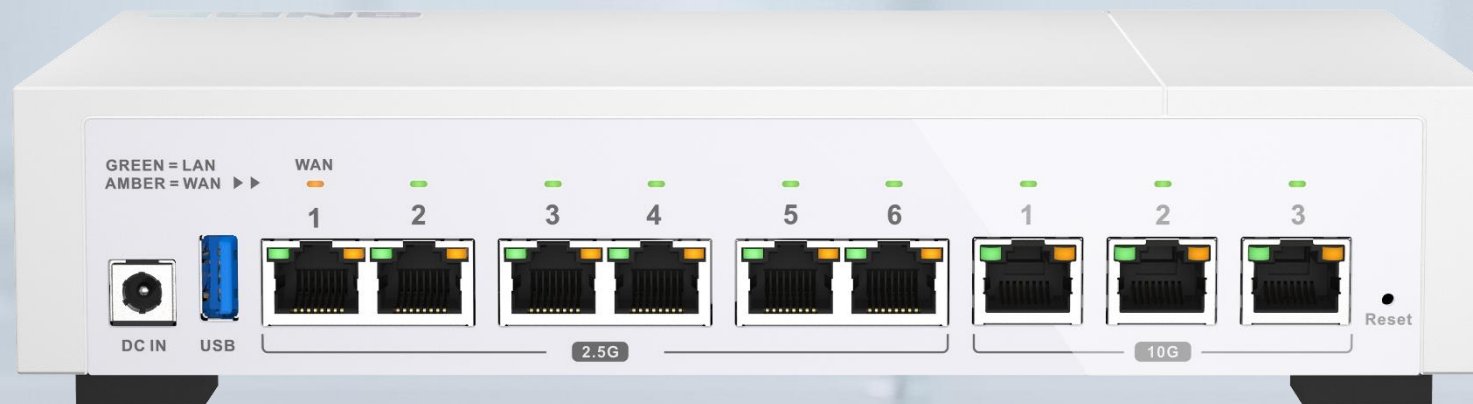
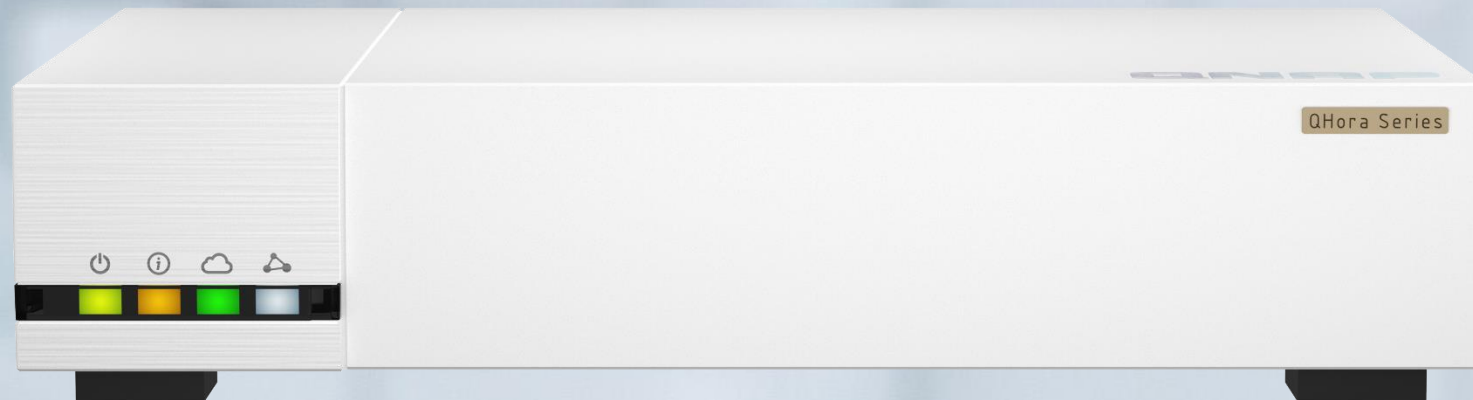


# QHora-321 產品圖



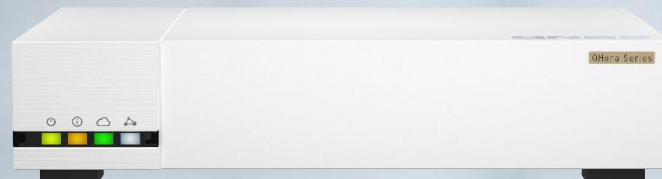
6x2.5 GbE RJ45





# QHora-322 產品圖



6x2.5GbE RJ45  
3x10GbE RJ45

# LED-前面版狀態燈

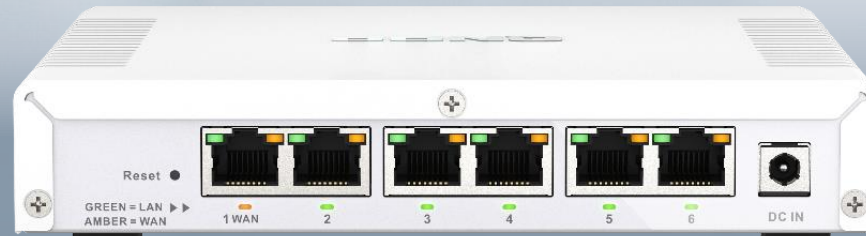


位置	標誌項目	Icon	亮燈規則
左一 黃綠燈(Yellow green)	Device power status		<ul style="list-style-type: none"> <li>•Off: Power OFF</li> <li>•Steady: Power ON</li> <li>•Keep blinking with Device status LED in 1sec on/off period: System Error</li> </ul>
左二 橘色(Amber)	Device local status		<ul style="list-style-type: none"> <li>•Off: Device is power off</li> <li>•Steady: Device is booted up and initialized success</li> <li>•Keep blinking with 1sec on/off period: Device is initializing</li> <li>•Keep blinking with 2sec on/off period: Device is being firmware updating</li> <li>•Keep blinking with Power LED with 1sec on/off period: System Error</li> </ul>
左三 青綠燈(Blue green)	Device connection status with QuWAN Orchestrator		<ul style="list-style-type: none"> <li>•Steady: Connected to QuWAN Orchestrator and can be managed.</li> <li>•Keep blinking with 0.5sec on/off period: Device is joining to QuWAN Orchestrator.</li> <li>•Keep blinking with 2sec on/off period: Lost connection to the QuWAN Orchestrator (Device joined to QuWAN before but lost connection now)</li> <li>•Off: Did not join to QuWAN Orchestrator .</li> </ul>
左四 白色(White)	Device auto mesh connection status		<ul style="list-style-type: none"> <li>•Steady: All QuWAN mesh VPN tunnels on this device are connected</li> <li>•Keep blinking with 2sec on/off period: All/ Partially of QuWAN mesh VPN tunnels on this device disconnected</li> <li>•Off: Did not join to QuWAN Orchestrator.</li> </ul>

# LED-網路孔介面狀態燈

## Interface indicator

Port Role	Color of LED
WAN	Amber
LAN	Green



## QHora-321 RJ45 port LED behavior

Port number	Port speed	LED color	Behavior
1-6	2.5GbE	Green(Left)	Link is operating at 2.5 Gbps, flashing: link up, off: no link
		Amber(Right)	Link is operating at 1G/100M bps, flashing: link up, off: no link



## QHora-322 RJ45 port LED behavior

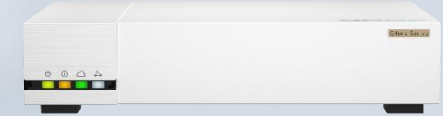
Port number	Port speed	LED color	Behavior
2.5GbE 1-6	2.5GbE	Green(Left)	Link is operating at 2.5 Gbps, flashing: link up, off: no link
		Amber(Right)	Link is operating at 1G/100M bps, flashing: link up, off: no link
10GbE 1-3	10GbE	Green(Left)	Link is operating at 10 Gbps, flashing: link up, off: no link
		Amber(Right)	Link is operating at 5G/1G/100M bps, flashing: link up, off: no link

# 如何選擇適合的QHora





# 我該挑選那一款QHora?



	QHora-301W	QHora-321	QHora-322
10GbE RJ45 port	2	-	3
2.5GbE RJ45 port	-	6	6
WiFi 6	Y	-	-
QuWAN	Y	Y	Y
QuWAN QVPN support	Y	Y	Y
Max QBelt VPN connections	30	700	1000
Max performance of QBelt VPN*	116Mbps	160Mbps	160Mbps
建議情境	<ul style="list-style-type: none"> <li>多點布建且需要透過SD-WAN來進行連線</li> <li>有高速設備如10GbE NAS連接需求</li> <li>高速Wifi連線需求</li> </ul>	<ul style="list-style-type: none"> <li>多點布建且需要透過SD-WAN來進行連線</li> <li>多VPN clients 從外點連線的需求</li> </ul>	<ul style="list-style-type: none"> <li>多點布建且需要透過SD-WAN來進行連線</li> <li>多VPN clients 從外點連線的需求</li> <li>有高速設備如10GbE NAS連接需求</li> </ul>

Note: based on the lab test with iperf, the result may be different based on real network deploy at your place.

The QNAP logo is located in the top left corner of the image. It consists of the letters 'QNAP' in a bold, white, sans-serif font, with a stylized blue and white wave-like graphic element to the left of the letters.

# QHora 321/322

是您最好的選擇！

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10GbE  
2.5GbE

