

**QNAP**

# QSW-M2106R-2S2T

L2 10GbE/2.5GbE Managed Switch

Upgrade network with multiple transmission speeds



2.5GbE



10GbE

1



2 in 1U / half-rackmount

2

# Increasing data size. Growing WiFi speed

- Video file/streaming
  - Video format evolution (720p→1080p→4K Ultra HD >8K UHD→10K)

	1080p 60 ProRes HQ	4K ProRes HQ 24	4K RAW BMPC 24	8K RedCode Raw 75
File size per hour	223.77GB	318GB	741.6GB	7.29TB

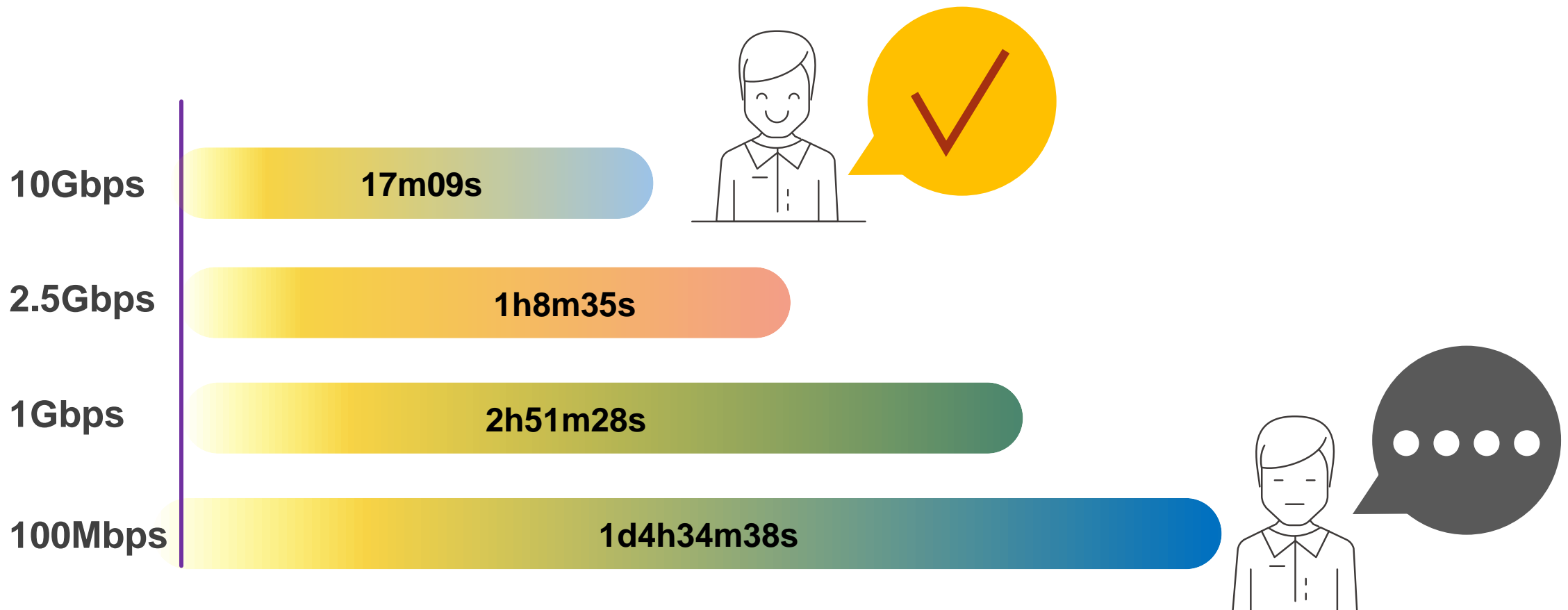
- WiFi: WiFi5→WiFi6→WiFi6E→WiFi7
  - As WiFi technology evolving, wired speed needs to be upgraded too. There are some WiFi6/6E devices equipped with 2.5GbE port even 10GbE port.



# How long do you want to wait?

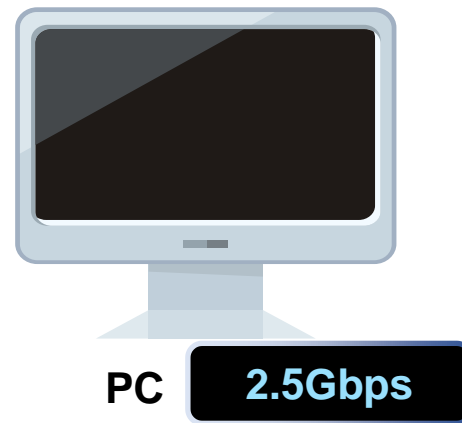
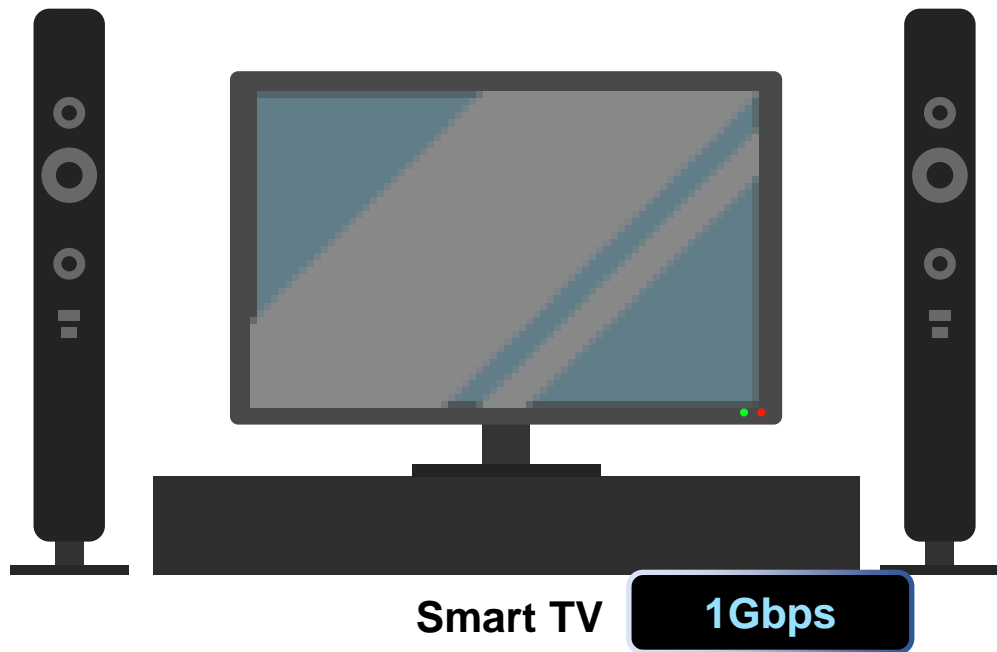
## The estimated time to backup 1TB file

Condition: Effective Data Rate 95%, Payload Data Rate (w/ Overhead) 90%



# Do you really need all 10GbE switches?

10GbE is fast, but there are still some non-10GbE clients...



# 1GbE is enough now, how about in the future?

- 2.5GbE is taking off and becoming increasingly available in new computers and networked devices!
- Upgrade to a 2.5GbE switch now to futureproof your network for these devices.



TP-Link EAP670



Netgear AXE7800



TP-Link Archer AX6000



TP-Link Archer GX90



Gigabyte Z490 AORUS MASTER



Apple MacBook



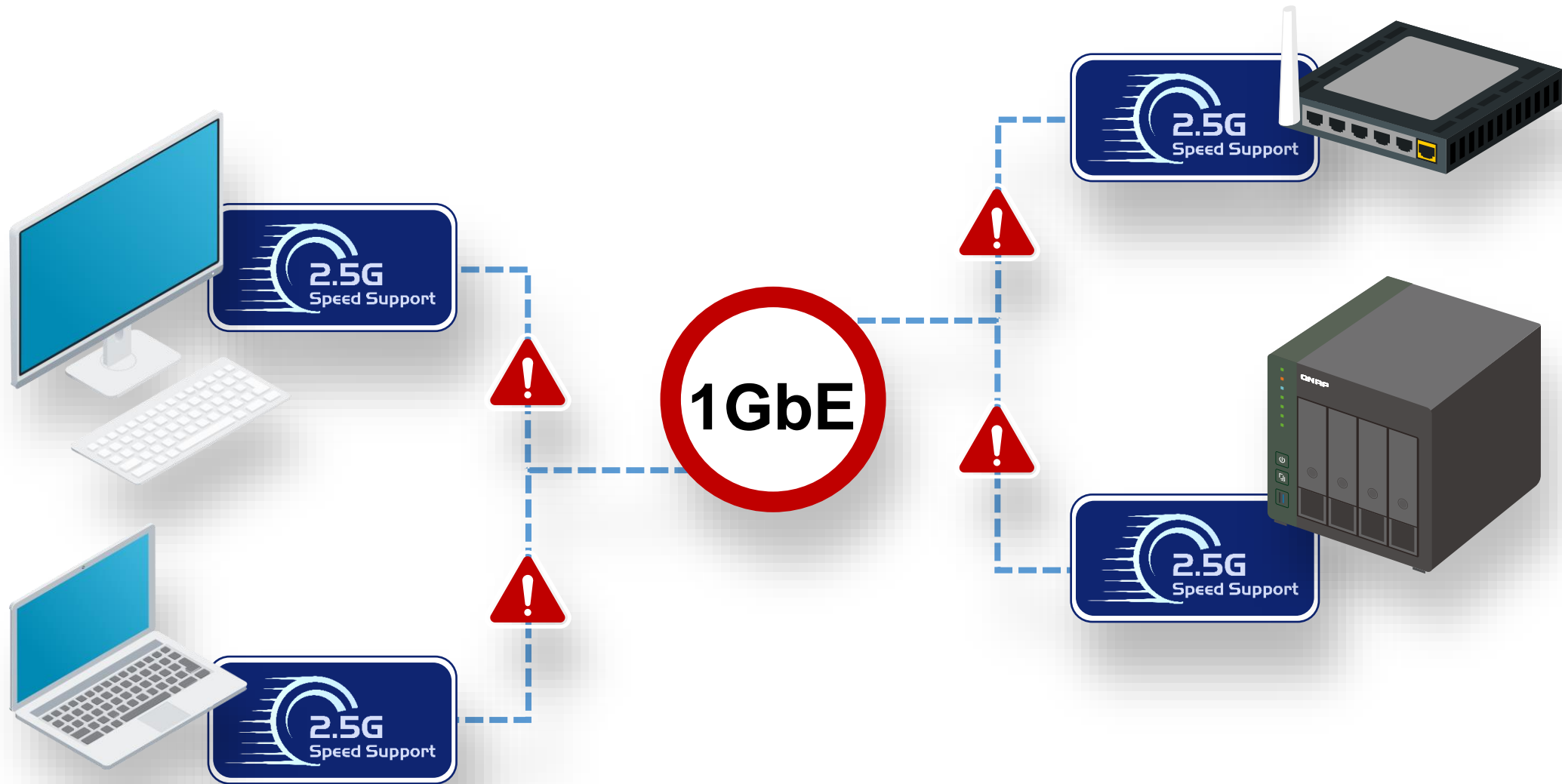
Asrock Z490 Taichi



QNAP TS-431P3

QNAP TS-231P3

# Don't let the switch become a network bottleneck



# 2.5GbE can be used with original Cat5e cables

- Don't need to re-deploy the cables

	CAT 5e	CAT 6	CAT 6A
100M	✓	✓	✓
1G	✓	✓	✓
2.5G	✓	✓	✓
5G	✓	✓	✓
10G	X	✓(55m)	✓

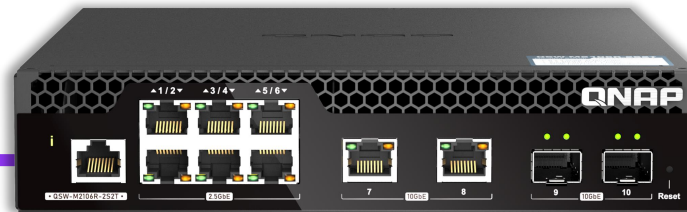


# Connect your current devices directly

If the existing devices only have 1GbE or even 100MbE, it can still be connected directly and used without any problem



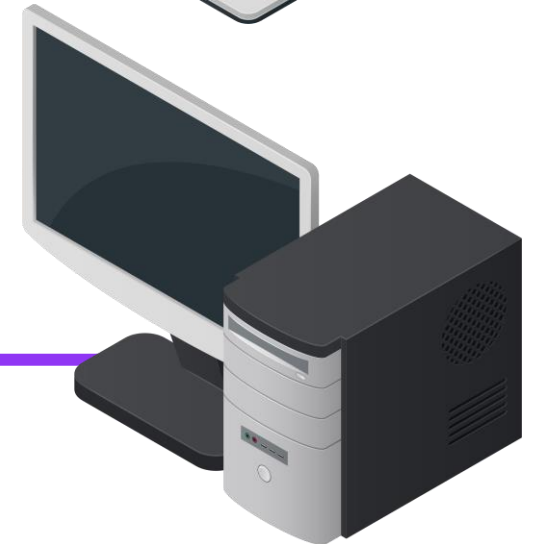
100MbE



2.5GbE

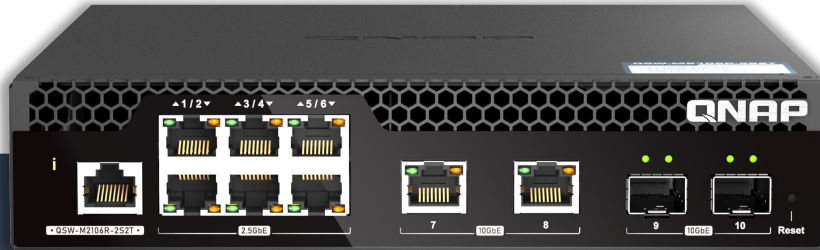


1GbE





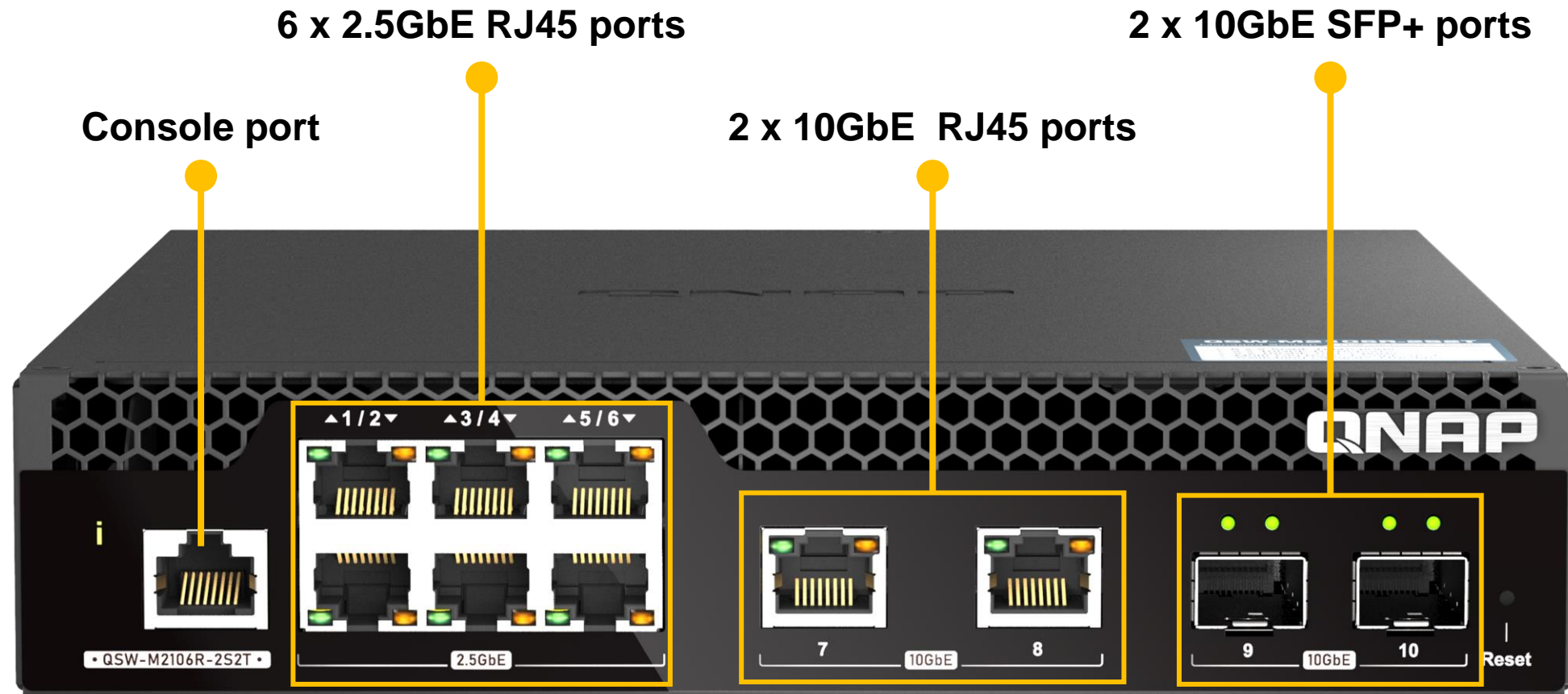
# QSW-M2106R-2S2T Spec



## QSW-M2106R-2S2T

<b>Management</b>	Layer 2 Web Managed switch
<b>Number of Port</b>	10
<b>2.5 GbE RJ45</b> (Support 2.5GbE/1GbE/100M)	6
<b>10 GbE RJ45</b> (Support 10GbE/5GbE/2.5GbE/1GbE/100M)	2
<b>10 GbE SFP+</b> (Support 10GbE/1GbE)	2
<b>Switch bandwidth</b>	110Gbps
<b>Packet buffer size</b>	12Mbit
<b>Jumbo Frame</b>	9Kbytes
<b>MAC table</b>	16K
<b>Fan design</b>	With fan
<b>Form factor</b>	Half-rackmount

# QSW-M2106R-2S2T Interface



# Half rackmount design



**Install Single QSW-M2106R-2S2T in 1U space of rack**

**Install QSW-M2106R-2S2T and QSW-M2108R-2C in 1U space of rack**



**Note1: QSW-M2106R-2S2T only**

**Note2: Requires separate 2-in-1U rackmount kit. Please visit <https://shop.qnap.com>.**

# QSW-M2106R-2S2T Software highlights



# Easy to use GUI design

- Rich functions and easy to use
- Straightforward web design lets user realize the setup logic quickly

The image displays three overlapping screenshots of the QSS Management web interface, demonstrating its user-friendly design and rich functionality.

**Overview Screenshot:** Shows the main dashboard with a sidebar menu (Overview, Port Management, VLAN, Link Aggregation, RSTP, LLDP, IGMP Snooping, ACL, QoS) and a main content area. The main content area includes a "Port Status" section with a visual representation of ports (5G and 1G) and a "System Information" section showing Model Name: QSW-M408-4C and IP address: 172.17.22.63.

**Port Management Screenshot:** Shows the "Port Management" configuration page. It includes a "Dashboard" section with "Device information" (Port Status) and "Current Port status" (Online: 2 port, Offline: 10 port, Enabled: 10 port, Disabled: 0 port). Below this is a table for "Port Configuration":

Port	State	Speed
10	Online	Auto
11	Online	Auto
12	Online	Auto

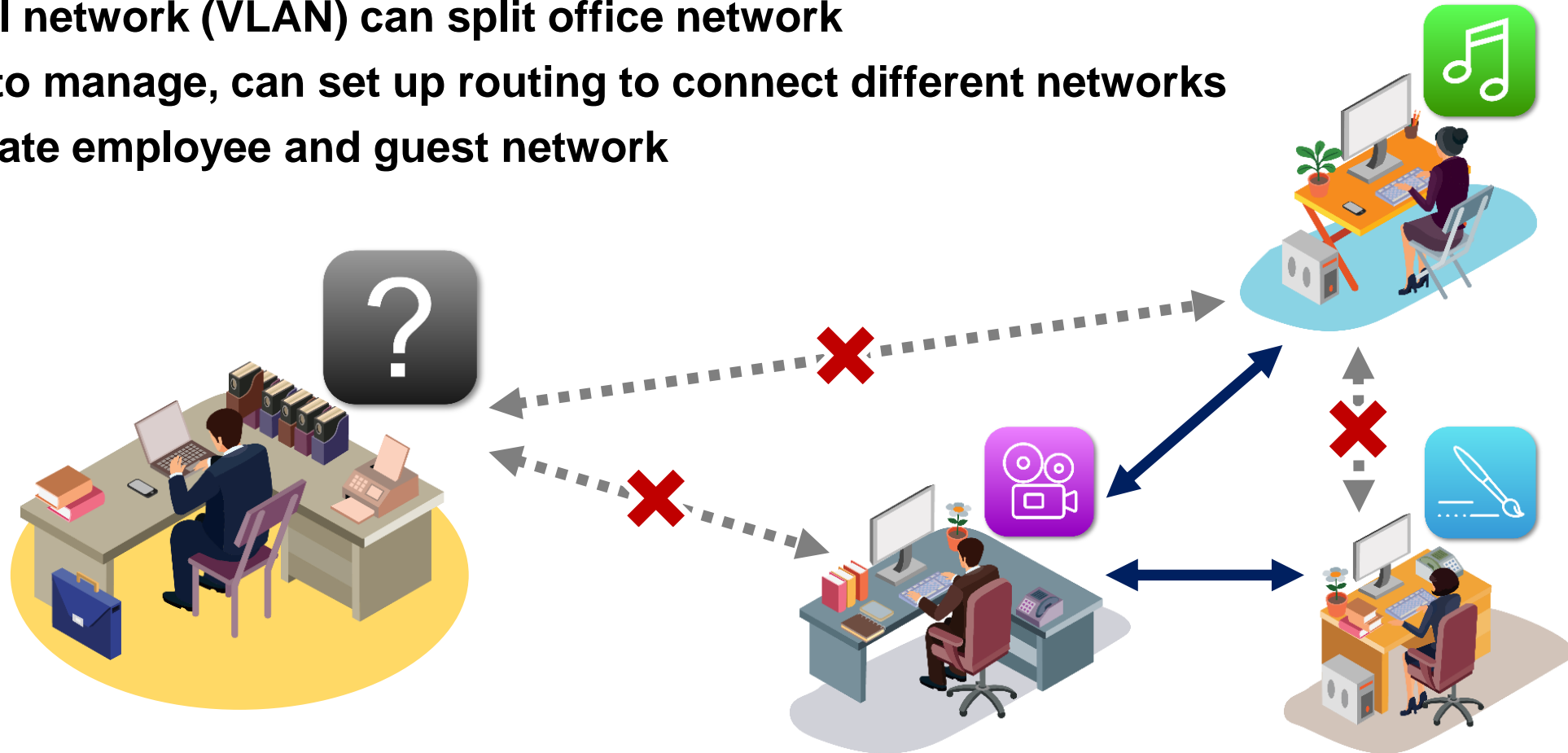
**VLAN Screenshot:** Shows the "VLAN" configuration page. It includes a "Dashboard" section with "VLAN" information and a table for "VLAN Configuration":

VLAN ID	Port	1	2	3	4	5	6	7	8	9	10	11	12	Action
1		U	U	U	U	U	U	U	U	U	U	U	U	

The interface is clean, intuitive, and provides clear visual feedback for configuration changes.

# Split office network into different area

- Virtual network (VLAN) can split office network
- Easy to manage, can set up routing to connect different networks
- Separate employee and guest network



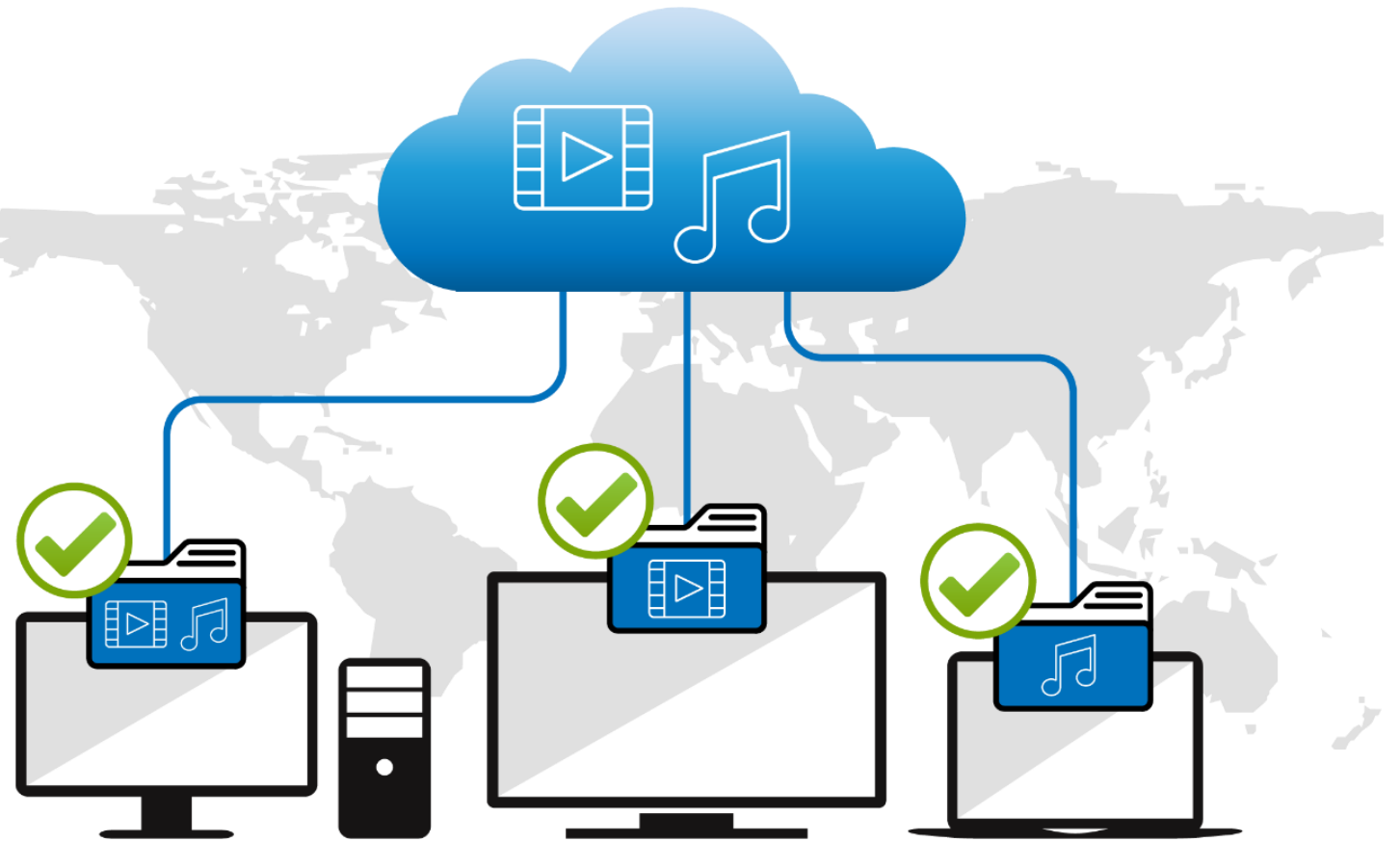
# Raise network speed with multiple network cable

- Link Aggregation (LACP) can aggregate multiple network cable into a single logical network
- Quick and direct to have a network more than 10GbE



# Deliver streaming to dedicate device specifically

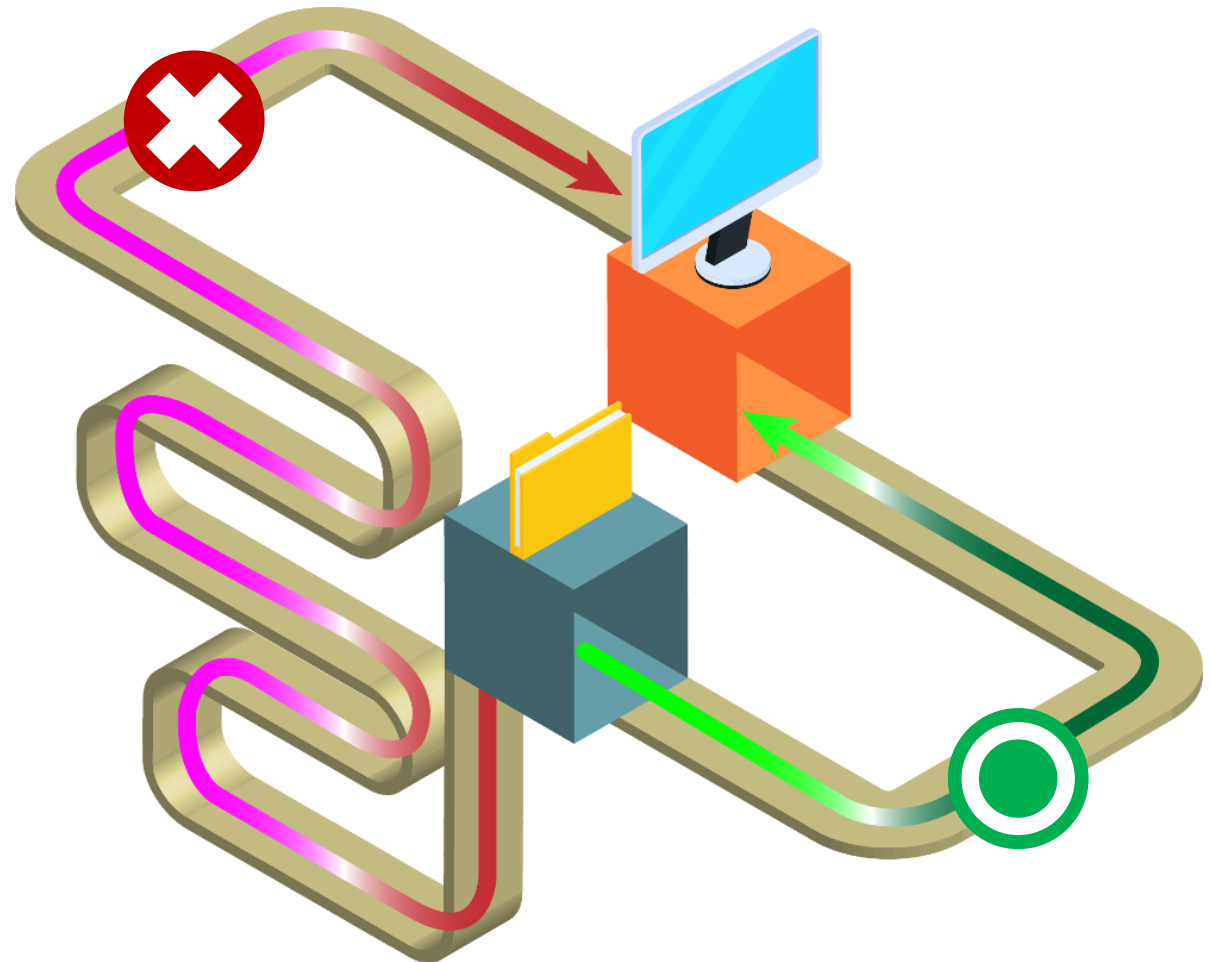
- **IGMP snooping** can record streaming request for each end point device
- **Avoid packet lost or wrong stream broadcast**





# Always looking for best routing

- Rapid Spanning Tree Protocol (RSTP) live check best networking route
- Always using most effective route for data transfer



# Firmware version live check



- One-click update
- Firmware version auto detect
- Manual update

# QSW-M2106 have more

- Ethernet flow control (IEEE 802.3x) managing packet transfer, avoid packet lost



- Link Layer Discovery Protocol (LLDP), easy to know which devices are connected



- Energy-Efficient Ethernet (IEEE 802.3az) and fan speed control, managing power consumption



**QNAP provide  
10GbE/2.5GbE total solution  
to unleash your network**



# QNAP 2.5GbE unmanaged switches

## QSW-1108-8T



- 8x 2.5GbE RJ45
- Auto loop detected
- Desktop design
- Fan less design

## QSW-2104-2T



- 4x 2.5GbE RJ45
- 2x 10GbE RJ45 (2T)
- Auto loop detected
- Desktop design
- Fan less design

## QSW-1105-5T



- 5x 2.5GbE RJ45
- Auto loop detected
- Desktop design
- Fan less design

## QSW-2104-2S



- 4x 2.5GbE RJ45
- 2x 10GbE SFP+ (2S)
- Auto loop detected
- Desktop design
- Fan less design

# QNAP 2.5GbE managed switches

## QSW-M2106-4C

NEW



- 6x 2.5GbE RJ45
- 4x 10GbE SFP+/RJ45 combo
- Layer 2 Management
- Desktop design

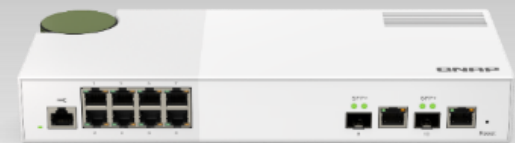
## QSW-M2106-4S

NEW



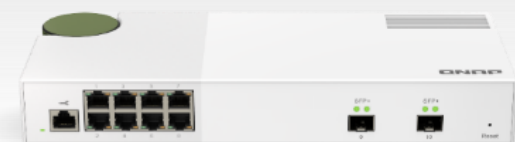
- 6x 2.5GbE RJ45
- 4x 10GbE SFP+
- Layer 2 Management
- Desktop design

## QSW-M2108-2C



- 8x 2.5GbE RJ45
- 2x 10GbE SFP+/RJ45 combo
- Layer 2 Management
- Desktop design

## QSW-M2108-2S



- 8x 2.5GbE RJ45
- 2x 10GbE SFP+
- Layer 2 Management
- Desktop design

## QSW-M2106R-2S2T

NEW



- 6x 2.5GbE RJ45
- 2x 10GbE RJ45
- 2x 10GbE SFP+
- Layer 2 Management
- Rack mount and 2 for 1 design

## QSW-M2106PR-2S2T

COMING SOON



- 6x 2.5GbE RJ45 with 802.3bt (90W)
- 2x 10GbE RJ45 with 802.3bt (90W)
- 2x 10GbE SFP+
- Power budget: 310W
- Layer 2 Management
- Rack mount and 2 for 1 design

## QSW-M2116P-2T2S



- 16x 2.5GbE RJ45 with 802.3at(30W)
- 2x 10GbE RJ45 with 802.3 bt(90W)
- 2x 10GbE SFP+
- Layer 2 Management
- Power budget: 280W
- Rackmount design

## QSW-M2108R-2C



- 8x 2.5GbE RJ45
- 2x 10GbE SFP+/RJ45 combo
- Layer 2 Management
- Rack mount and 2 for 1 design

# If more budget and all 10GbE needed

## Managed switches

### QSW-IM1200-8C



- 3 x powers with redundant design
- 4 x10GbE SFP+
- 8 x10GbE SFP+/RJ45 combo
- Layer 2 management
- Rackmount
- Fan less

### QSW-M1204-4C



- 8x 10GbE SFP+
- 4x 10GbE SFP+/RJ45 combo
- Layer 2 Management
- Rack mount design

### QSW-M804-4C



- 4x 10GbE SFP+
- 4x 10GbE SFP+/RJ45 combo
- Layer 2 Management
- Rack mount design

### QSW-M1208-8C



- 4x 10GbE SFP+
- 8x 10GbE SFP+/RJ45 combo
- Layer 2 Management
- Rack mount design

## Unmanaged switches

### QSW-1208-8C



- 4x 10GbE SFP+
- 8x 10GbE SFP+/RJ45 combo
- Rack mount design

# Tower NAS with embedded 2.5GbE

SMB



TS-873A

TS-673A

TS-473A

Enterprise



TS-h886

TS-h686

SMB



TVS-675

SMB



TBS-464

TS-453E

TS-253E

Home/SOHO



TS-364

TS-462

TS-262

TS-433



# Tower NAS with embedded 10GbE

With 10GbE BASE-T



TVS-h1688X /  
TVS-h1288X



TVS-872XT / TVS-672XT  
/ TVS-472XT



TS-832PX

With 10GbE SFP+



TS-431X3

10GbE + 2.5GbE

With 10GbE BASE-T



TS-i410X

# Rackmount network NAS with embedded 2.5/5/10GbE

## With 10GbE BASE-T or SFP+



TS-1886XU-RP R2



TS-hx83XU-RP



TS-hx87XU-RP



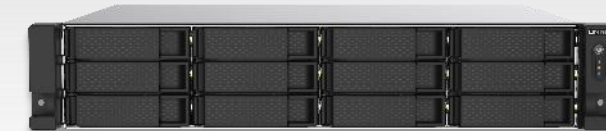
TS-hx77XU-RP



TS-435XeU



TS-873AeU/873AeU-RP/1273AU-RP/1673AU-RP



TS-X64U/X64eU series



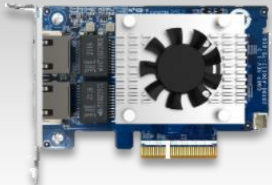
TS-x32PXU

+ 2 x 10GbE SFP+

# Network extension : Rich PCIe network extension card

## 10GbE series

**QXG-10G2TB**



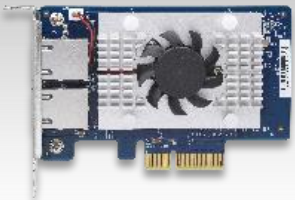
2 x RJ45

**QXG-10G2T-X710**



2 x RJ45

**QXG-10G2T-X107**



2 x RJ45

**QXG-10G1TB**



1 x RJ45

## 5GbE series

**QXG-5G Family**



1 x RJ45



2 x RJ45



4 x RJ45

## 2.5GbE series

**QXG-2.5G Family**



1 x RJ45



2 x RJ45



4 x RJ45



# Network extension : hand carry adaptor

## QNA-UC5G1T



### USB 3.2 Gen 1

- RJ45 NBASE-T
- 4 speed: 5G/2.5G/1G/100M

USB Plug and play upgrade your PC/Laptop to 10GbE high speed network

<https://www.qnap.com/en/product/qna-uc5g1t>

## QNA-T310G1T



### Thunderbolt 3

- 10GbE NBASE-T port
- 5 speed: 10G/5G/2.5G/1G/100M



USB Plug and play upgrade your PC/Laptop to 10GbE high speed network, through Thunderbolt

<https://www.qnap.com/en/product/qna-tb-10gbe>

# QNAP



2.5GbE



10GbE

1

2



2 in 1U / half-rackmount

# QSW-M2106R-2S2T

## Is Your Best Choice!

Copyright© 2022 QNAP Systems, Inc. All rights reserved. QNAP® and other names of QNAP Products are proprietary marks or registered trademarks of QNAP Systems, Inc. Other products and company names mentioned herein are trademarks of their respective holders.

