QNAP

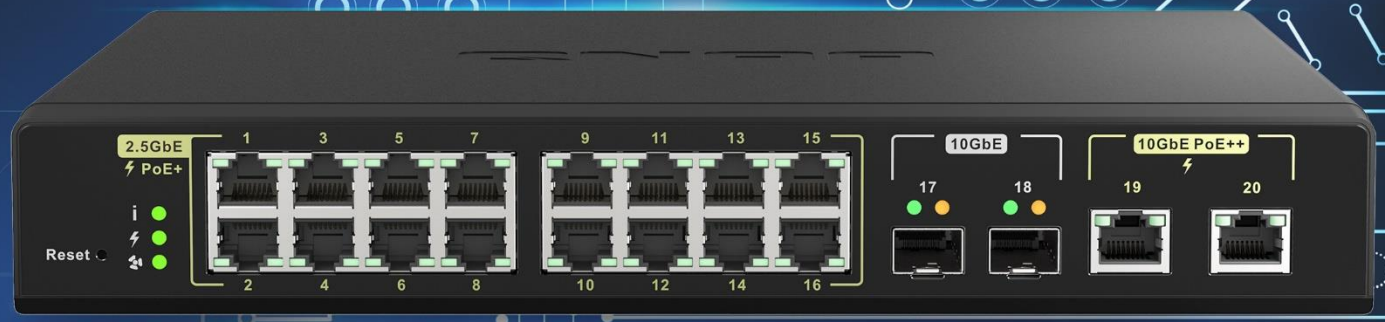
# QSW-M2116P-2T2S

## L2 2.5GbE/10GbE PoE++ Managed Switch

Deploys PoE power devices in stable office/store environment and provides high speed network

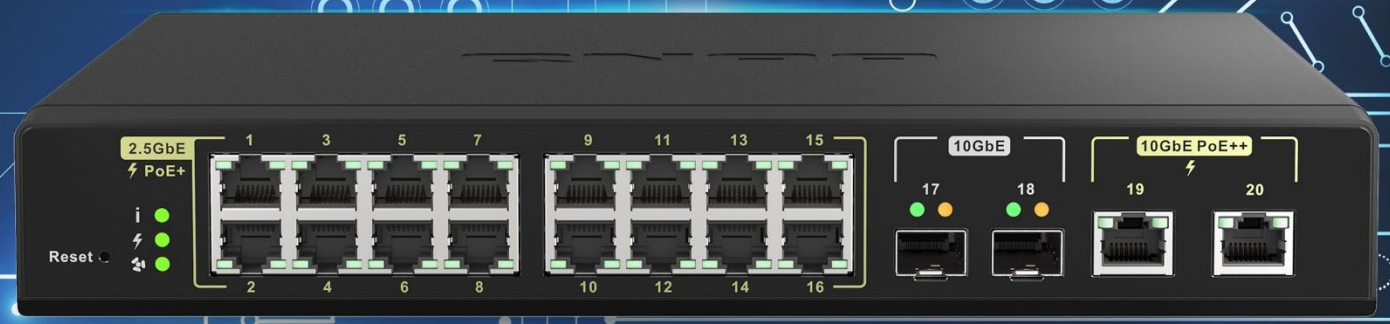
Full
**2.5GbE x 10GbE**
Managed

PoE++



QSW-M2116P-2T2S

# 2.5GbE + 10GbE + 802.3at/bt POE can resolve all the problems with single device for office/store



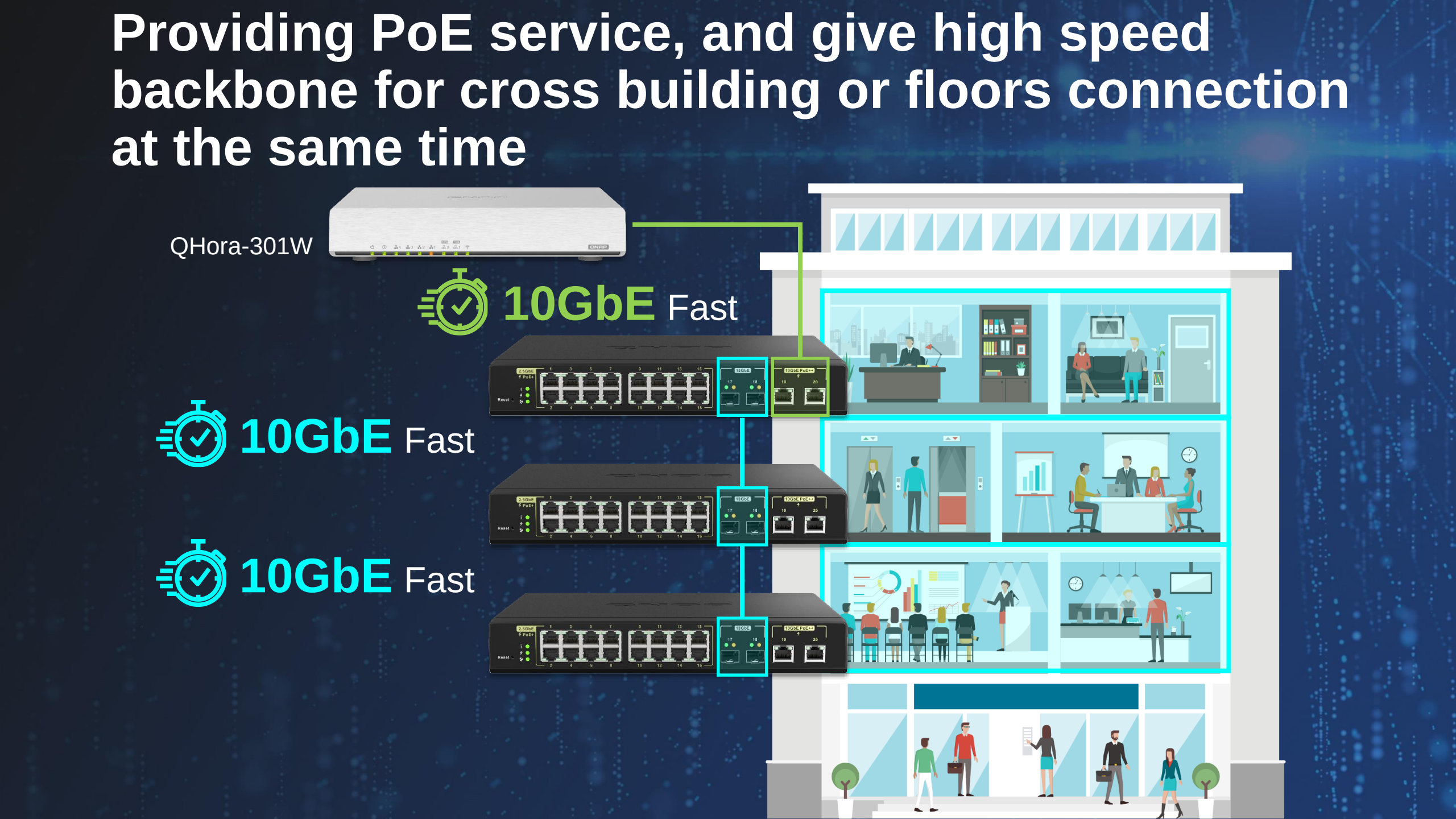
# Internet bandwidth can upgrade to 10GbE, let devices in the store can enjoy high speed internet access

QHora-301W

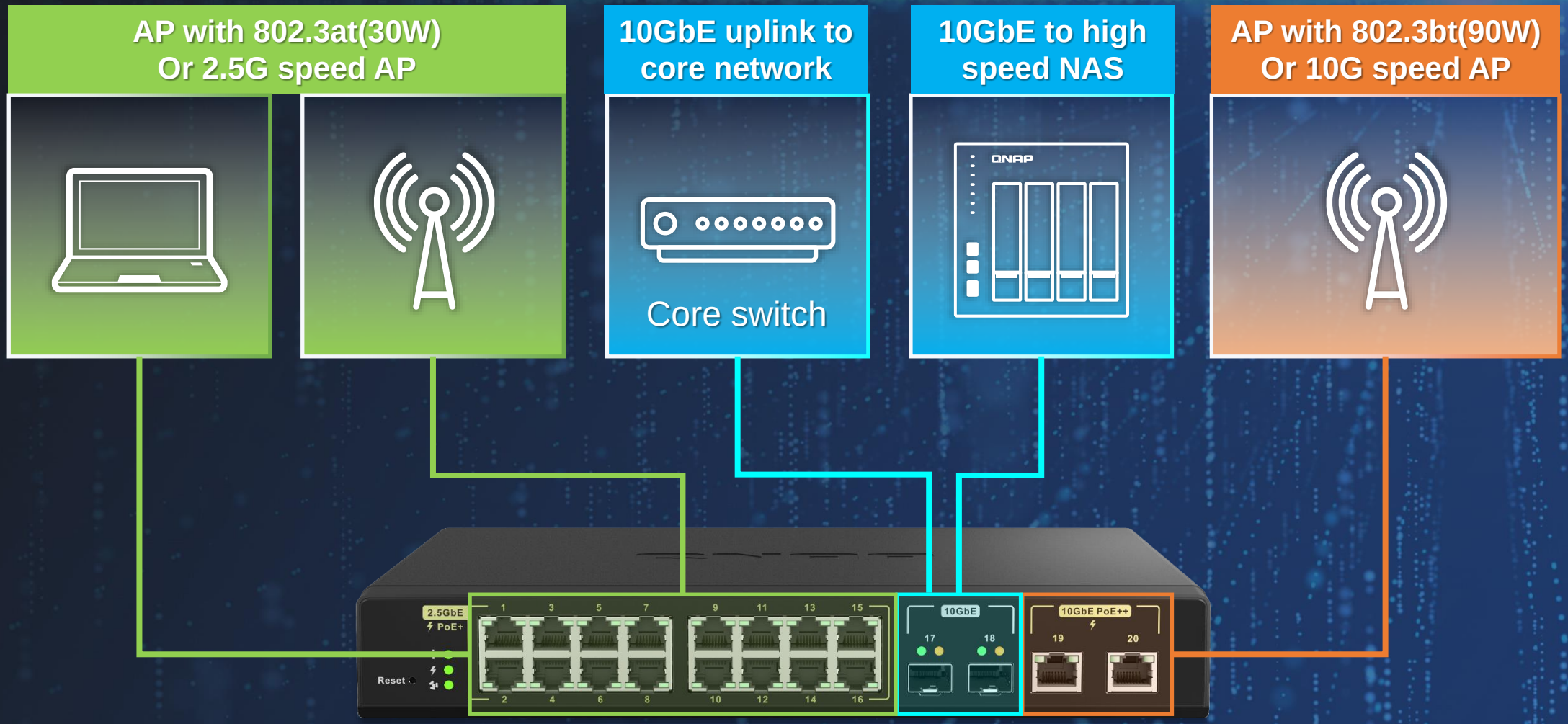
**10GbE** Fast

QSW-M2116P-2T2S

# Providing PoE service, and give high speed backbone for cross building or floors connection at the same time



# QSW-M2116P-2T2S can take care backbone and AP at the same time



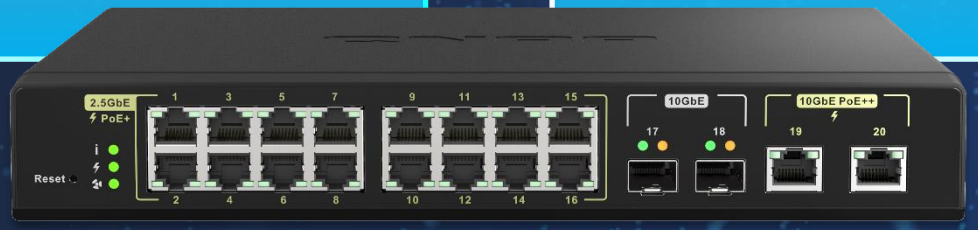
# QSW-M2116P-2T2S can take care your PoE power device and backbone network

## Support multiple PoE standard

- 2.5GbE + 802.3at(30W)
- 10GbE + 802.3bt(90W)
- PoE Power consumption up to 280W
- Smart PoE managed interface

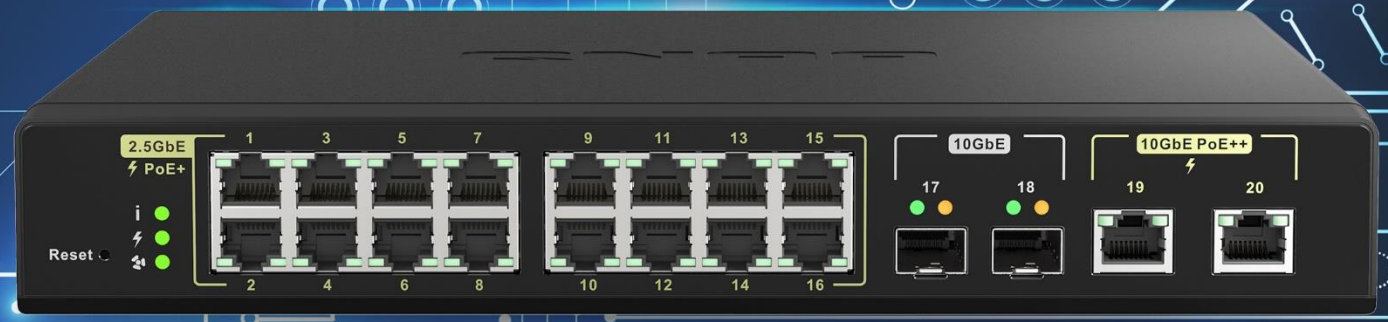
## Multiple options of uplink connector

- 10GbE RJ45 with 802.3bt(90W)
- 10GbE SFP+



QSW-M2116P-2T2S

# A lot of services can base on PoE to get power



# It is coming up with high speed AP

HOME / PRODUCTS / WIRELESS / ACCESS POINTS / INDOOR ACCESS POINTS / ARUBA 530 SERIES

## Aruba 530 Series Wi-Fi 6 Campus APs

High performance 802.11ax wireless for high density mobile and IoT deployments

530 SERIES DATA SHEET → 530 SERIES ORDERING GUIDE →

CONTACT SALES

# The service speed also getting faster

IEEE 802.11n (Wi-Fi 4) up to 600Mb/s

IEEE 802.11ac (Wi-Fi 5) up to 6.9Gb/s

IEEE 802.11ax (Wi-Fi 6 ) up to 9.6Gb/s

# For high speed wireless means APs need get more power for serving the clients

| | |
|---|---|
| Weight<br>With Mounting Kits | 1.20 kg (2.65 lb)<br>1.35 kg (2.98 lb) |
| Networking Interface | (1) 10/100/1000 Ethernet Port<br>(1) 1/10 Gbps ICM Ethernet Port |
| Buttons | Reset |
| Power Method | 802.3bt PoE |
| Supported Voltage Range | 44 to 57VDC |

**Power Sources and Power Consumption**

The AP supports direct DC power and Power over Ethernet (POE; on port E0 and/or E1)

When POE power is supplied to both Ethernet ports, the AP can be configured to combine or prioritize power sources

When both DC and POE power sources are available, DC power takes priority over POE

Power sources are sold separately; see the ordering Information section below for details

When powered by DC, 802.3bt (class 5) POE or 2x 802.3at (class 4) POE, the AP will operate without restrictions.

**Demand of PoE also getting higher**

**802.3af(15W)**

**802.3at(30W)**

**802.3bt(90W)**

# All these services are needed PoE

## Get power from PoE

**4K PTZ Surveillance**
Powering multiple cameras for store monitoring

**Electronic menu**
Provide power and networking capabilities

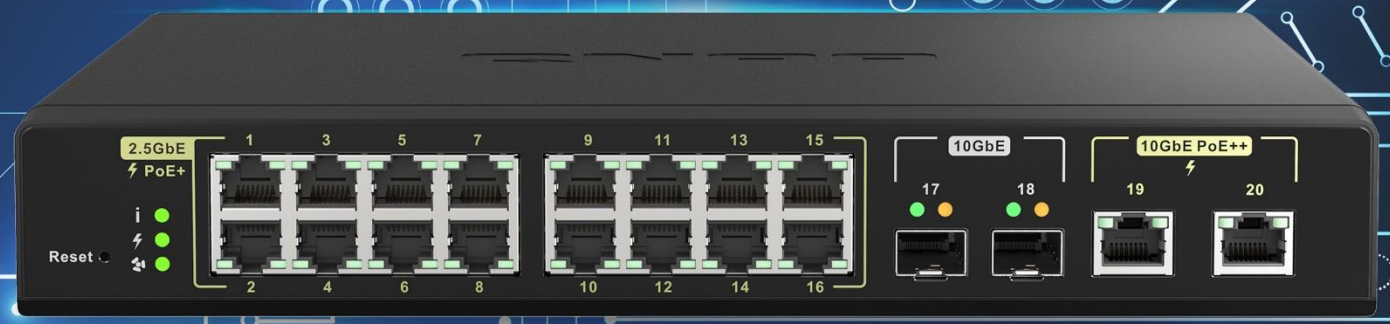
**Point of Sales**
Consumption behavior analysis and data storage

**WiFi 5/6 PoE Access point**
PoE powered and supports installation of AP Controller software

**Digital Signage**
Provide power and content management

QSW-M2116P-2T2S

# Now we had PoE, how about the Uplink network?



# Lots of end point devices are running in the store, but internet bandwidth is slow…

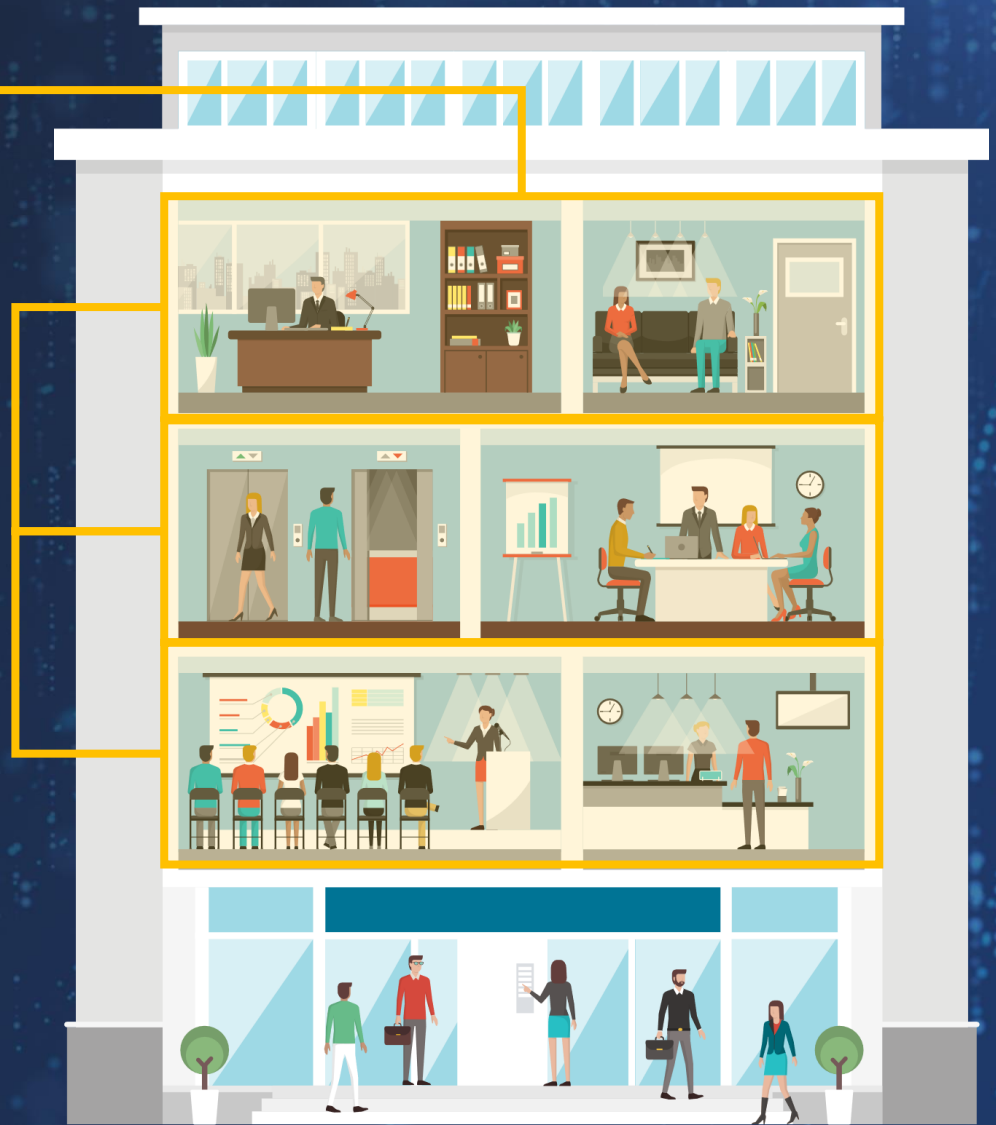
**1GbE** loading…

# There are many APs in different floors, but the backbone is very slow…

**1GbE** Slow…

**1GbE** Slow…

**1GbE** Slow…



# 10GbE can let network speed faster no matter for single device or multiple

QHora-301W

**10GbE** Fast

QSW-M2116P-2T2S

QHora-301W

**10GbE** Fast

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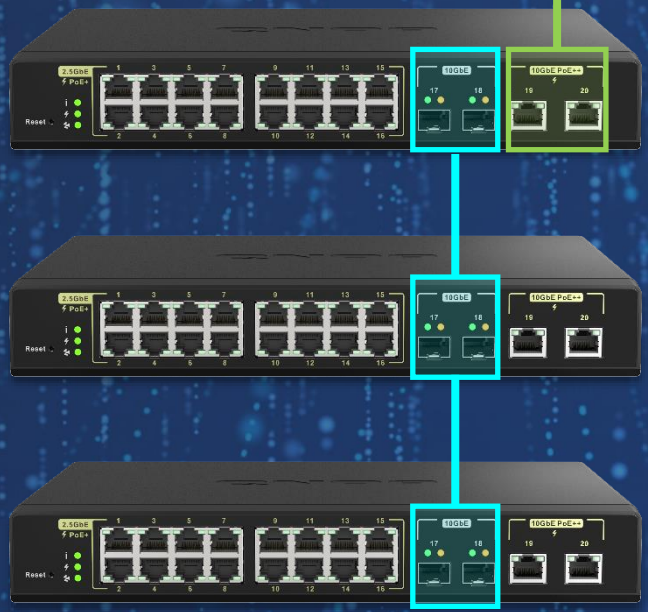
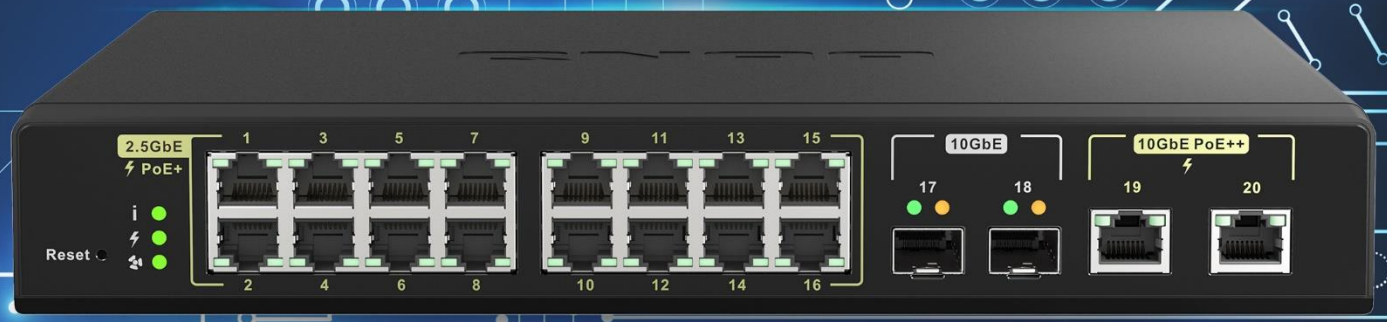


QSW-M2116P-2T2S

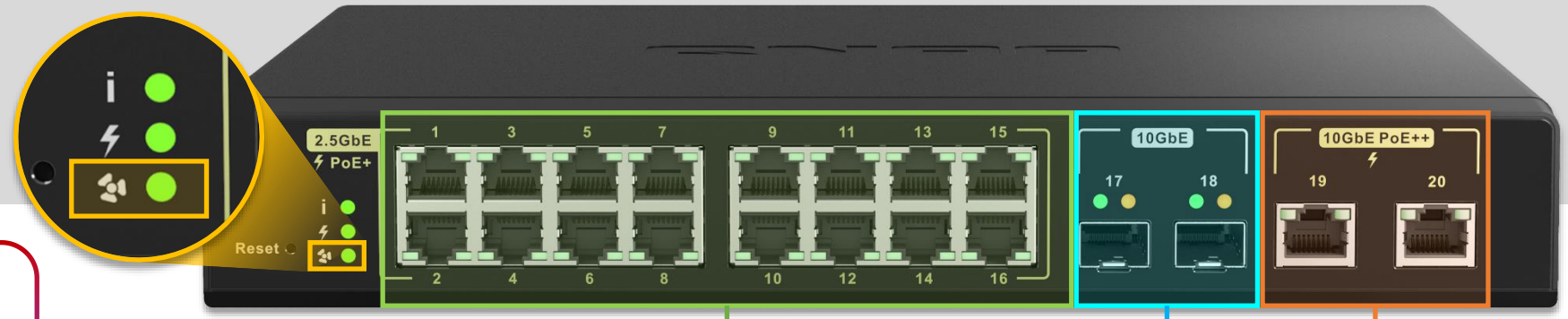
# Hardware introduction



# QSW-M2116P-2T2S front panel

**Independent fan status LED**

- Considering about it will have a lot of PoE demand, thermal is becoming a serious situation need to be monitored.
- Independent fan status LED can let you know is fan work in normally or not.




**PoE power consumption up to 280W**

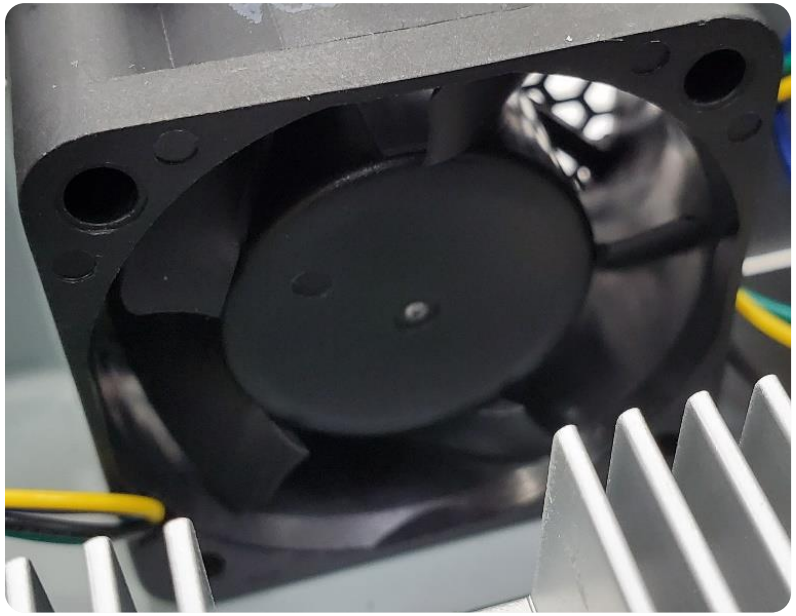
16 x 2.5GbE RJ45 with 802.3at(30W)

2 x 10GbE SFP+

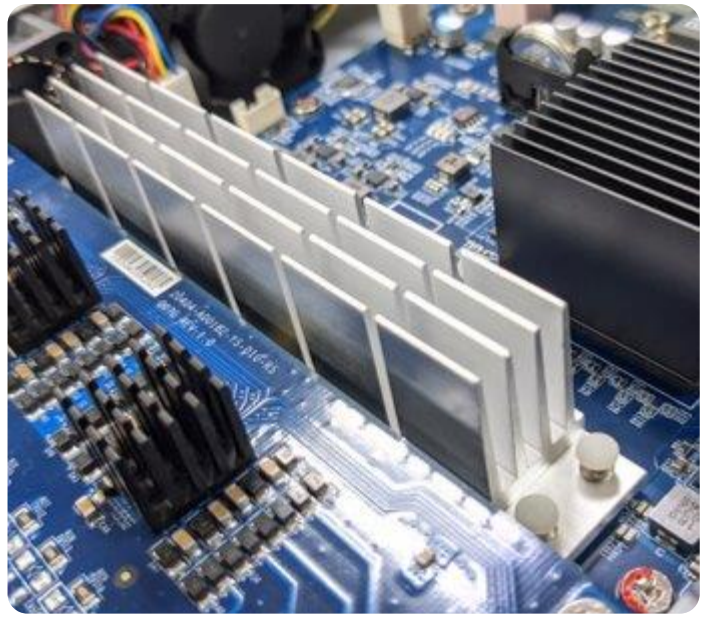
2 x 10GbE RJ45 with 802.3bt(90W)

# Optimized thermal design & quality components

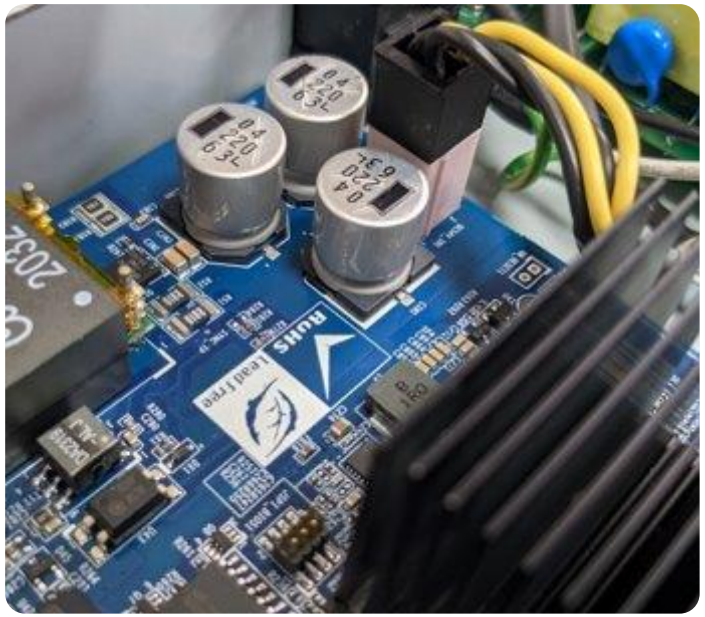
**PWM double ball bearing fan**



**Large conductive and directive heatsink**

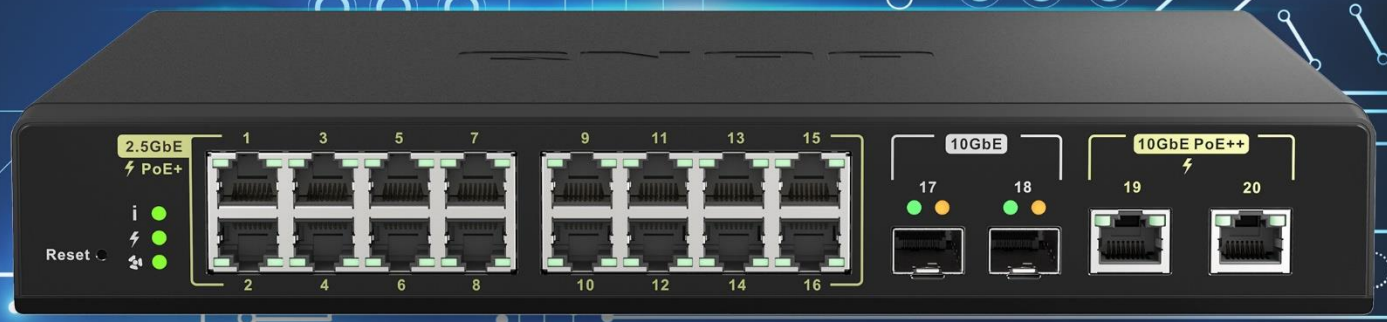


**All solid capacitors**



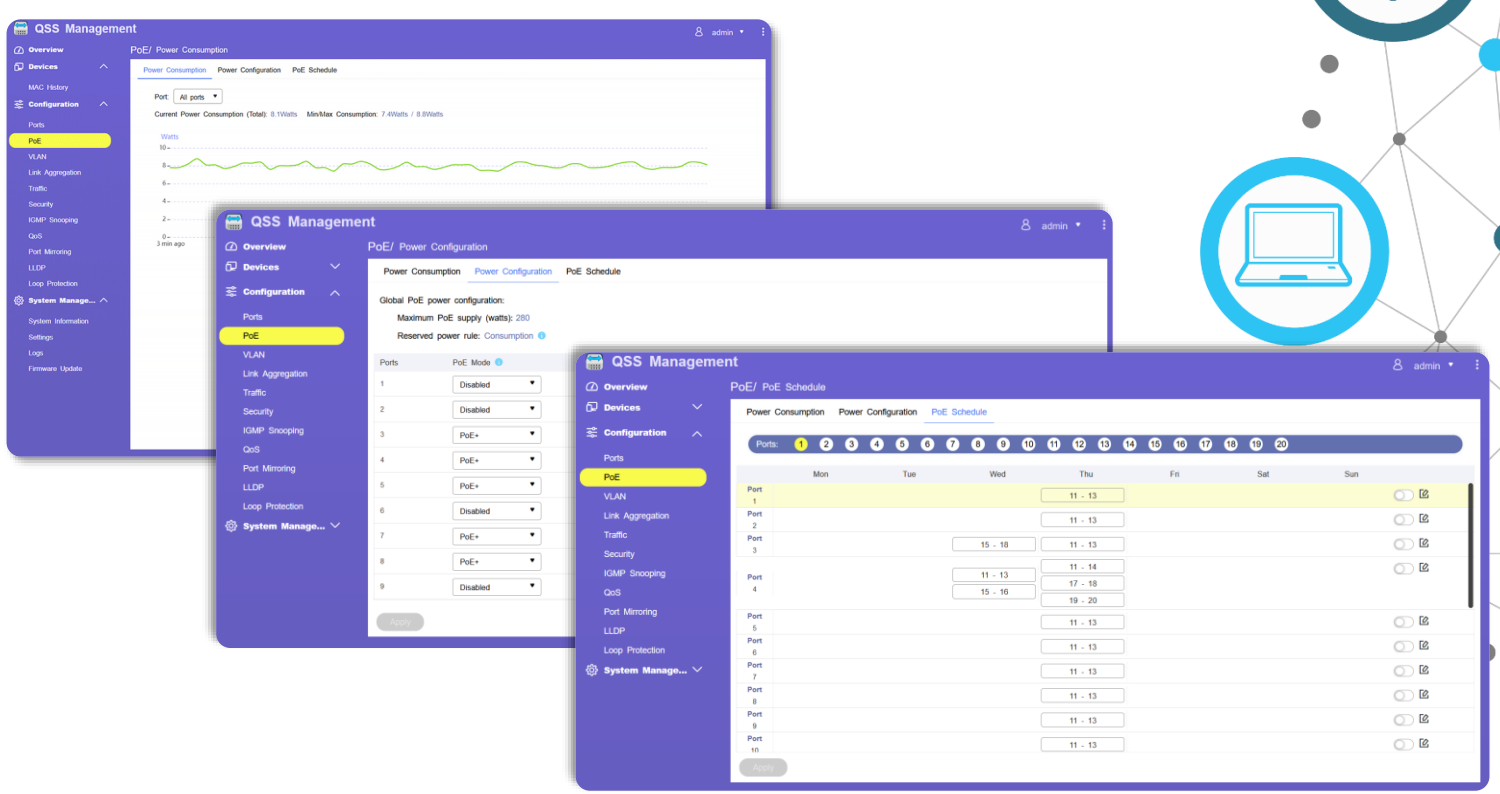
QSW-M2116P-2T2S

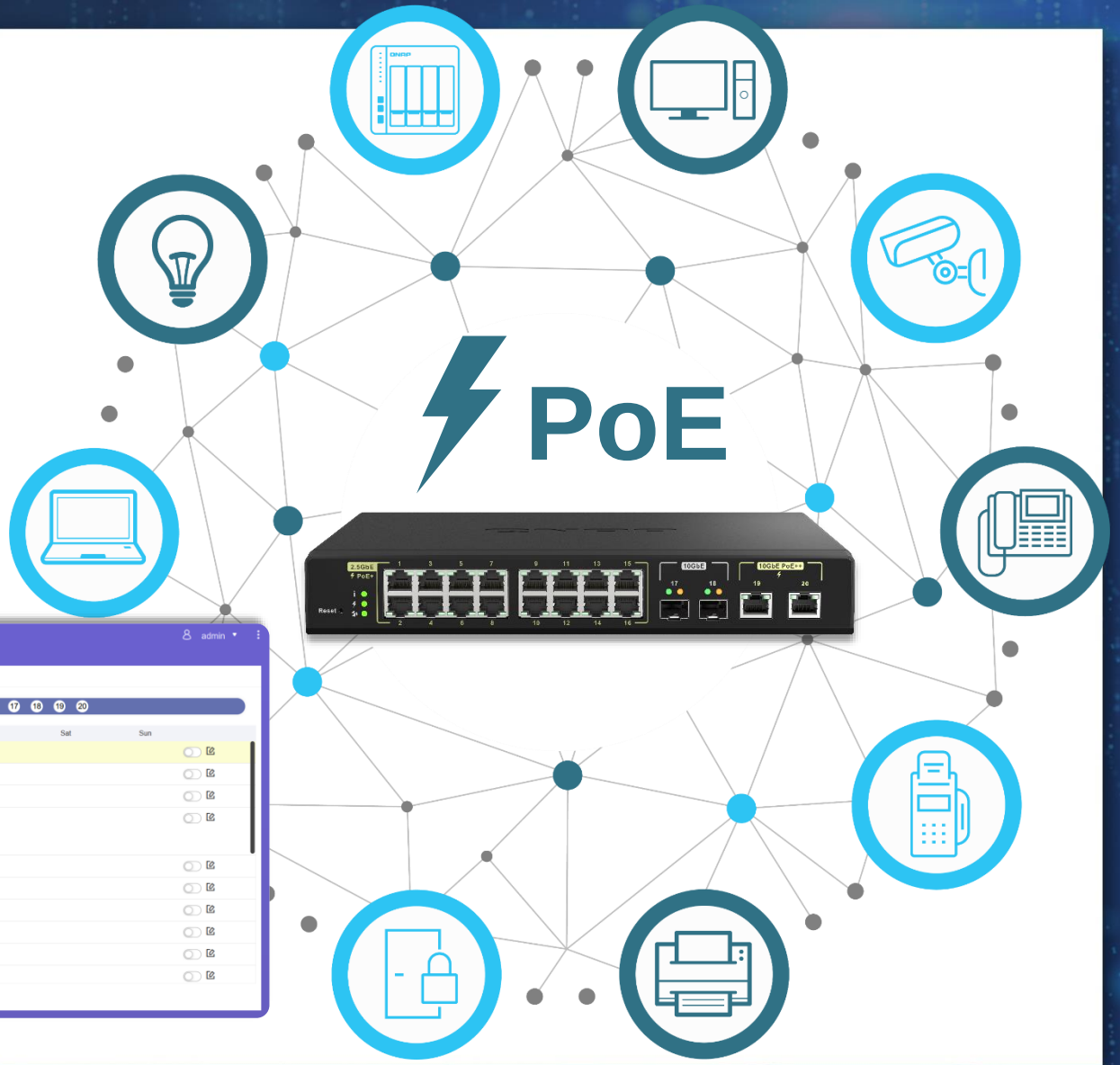
# Software introduction



# Fully managed your PoE status

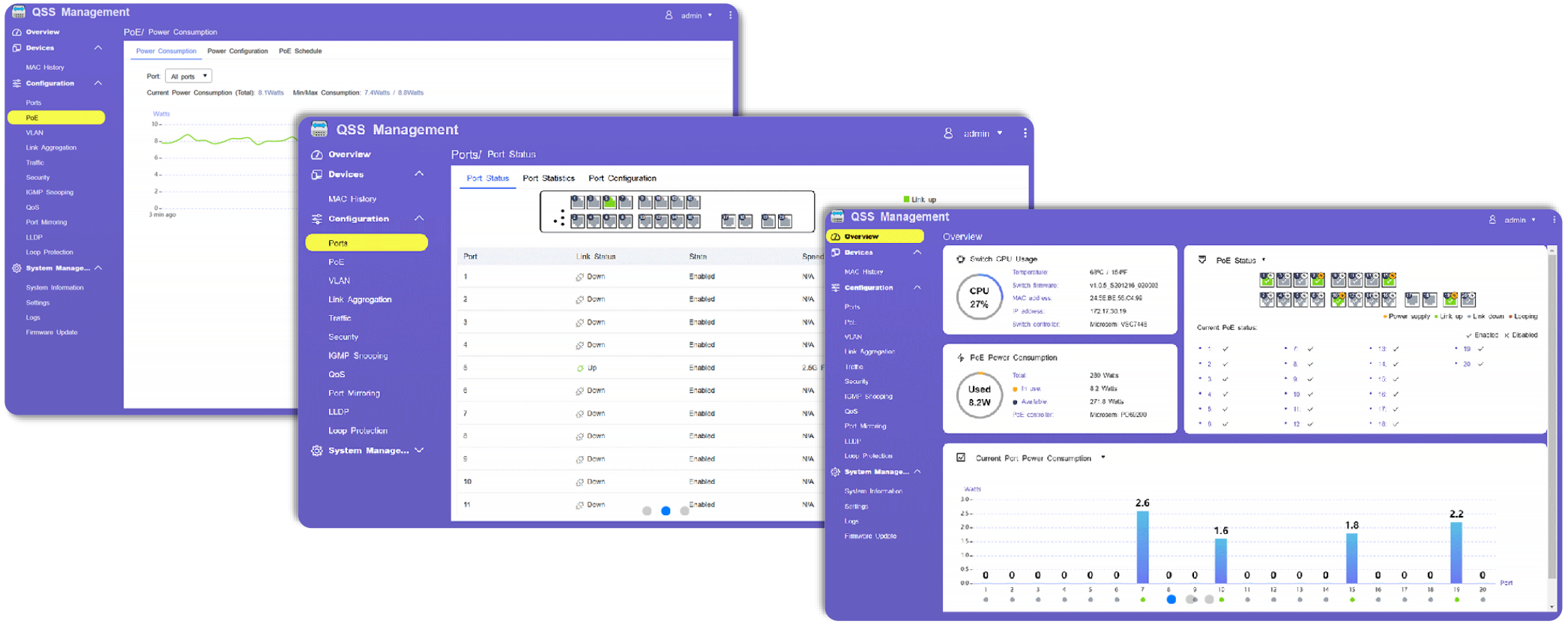
- **Realized the PoE budge**
- **Power prioritized and remote reboot PD**
- **Setup PoE scheduling**



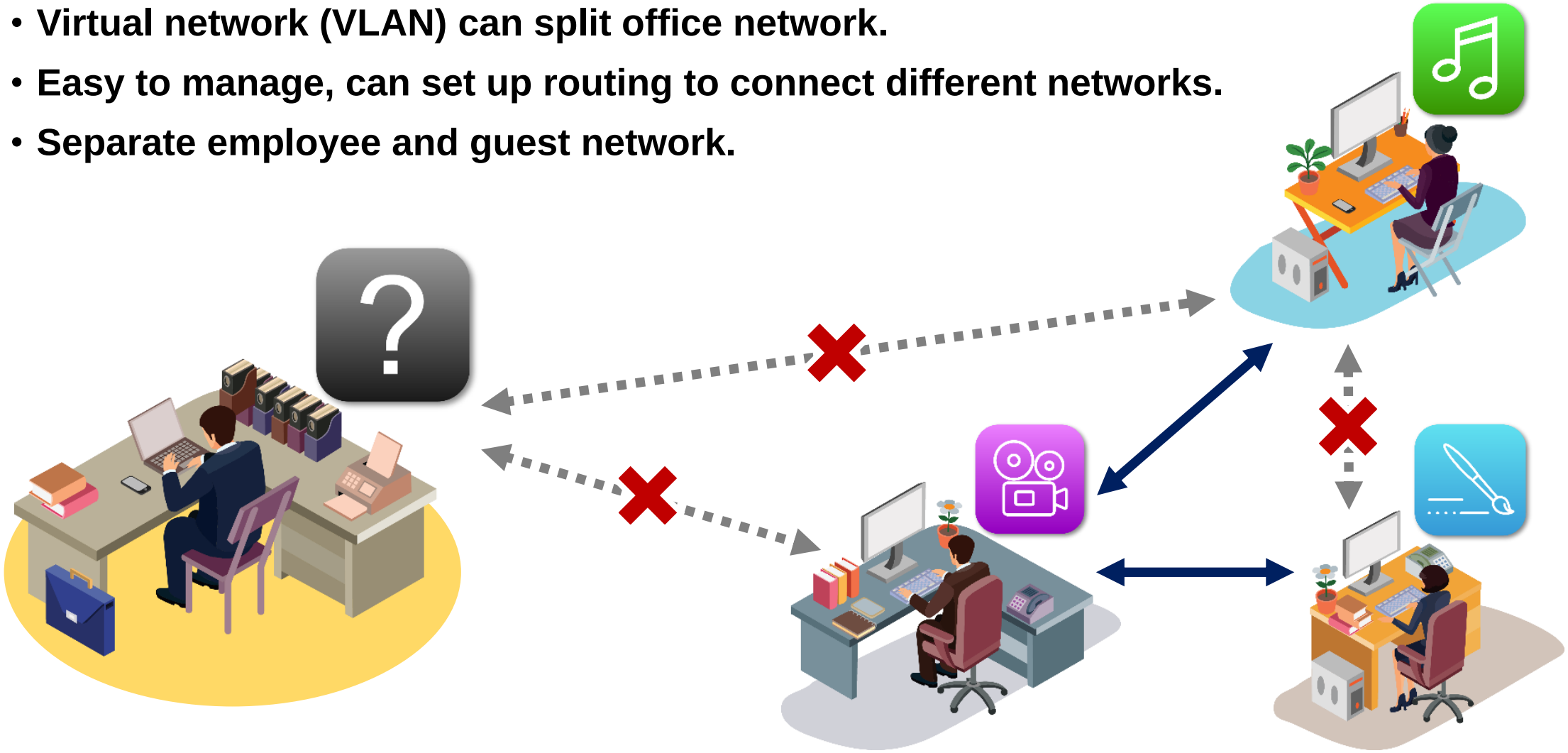
# Easy to use GUI design

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



# 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.

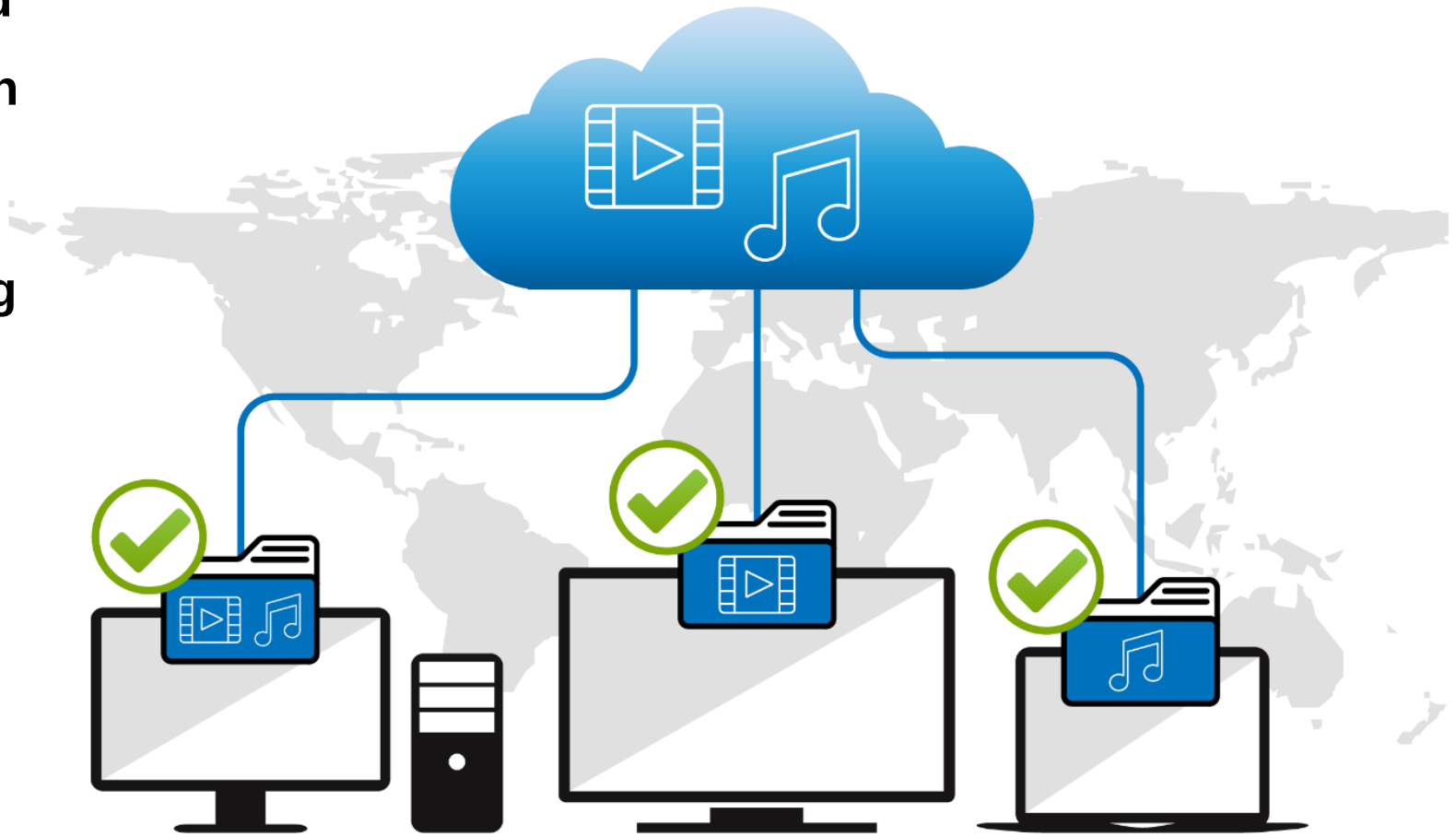


# Raise network speed with multiple network cable

- **Link Aggregation (LAG) 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.



# Firmware version live check

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

# QSW-M2116P-2T2S have more

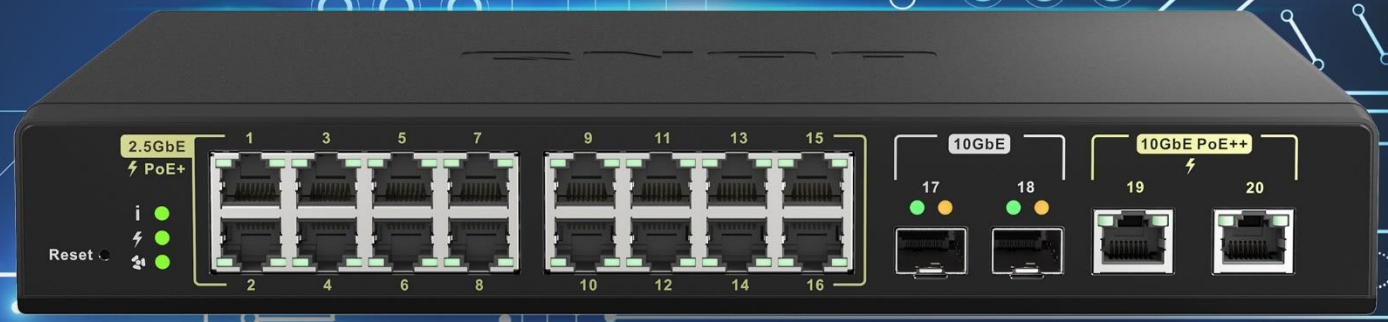
Ethernet flow control (IEEE 802.3x) managing packet transfer, avoid packet lost.

Link Layer Discovery Protocol (LLDP), easy to know which devices are conneted.

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

QSW-M2116P-2T2S

# Perfectly integrated with QNAP high speed products



# QNAP 2.5GbE teams give you perfect experience of high speed network

## Professional high efficiency network storage

TS-653D

TS-453D

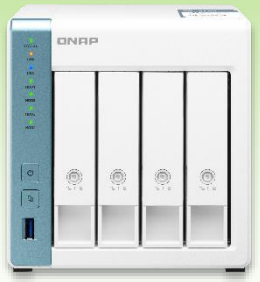
TS-253D

TS-431X3

Intel Celeron J4125 4 cores 2.0GHz, 2 x 2.5GbE, PCIe extend M.2 NVMe/ SATA SSD or 10GbE

Annapurna Labs AL-314 4 cores 1.7GHz, 1 x 10GbE SFP+, 1 x 2.5GbE

## Digital home with high quality of streaming




TS-431P3

TS-231P3

Annapurna Labs AL-314 4 cores 1.7GHz, 1 x 2.5GbE

# Tablet NAS with embedded 2.5/5/10GbE

## With 10GbE BASE-T

TVS-h1688X /TVS-h1288X

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

## With 10GbE SFP+

TS-832PX

TS-431X3

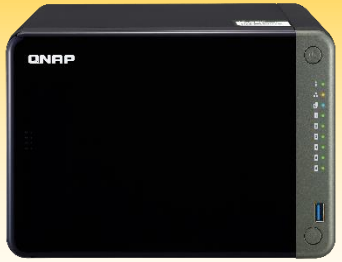
10GbE + 2.5GbE

## With 5GbE BASE-T

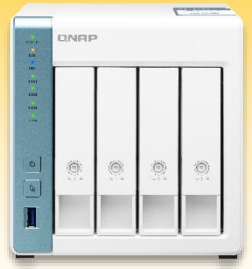
TVS-872N / TVS-672N

## With 2.5GbE BASE-T

TS-h886 / TS-h686



TS-653D / TS-453D / TS-253D

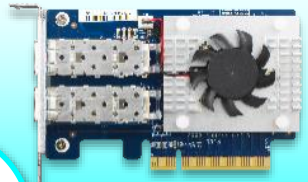


TS-431P3 / TS-231P3

# Network extension：rich PCIe network extension card

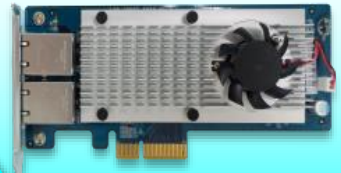
## 10GbE Series

### QXG-10G2SF-CX4



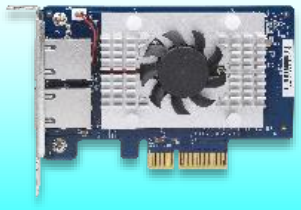
2 x SFP+

### LAN-10G2T-X550



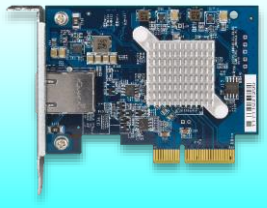
2 x RJ45

### QXG-10G2T-107



2 x RJ45

### QXG-10G1T



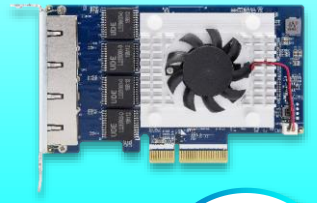
1 x RJ45

## 5GbE Series

### QXG-5G Family

1 x RJ45

2 x RJ45



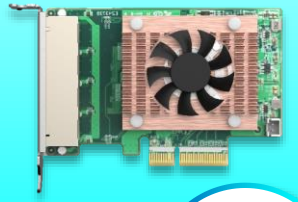
4 x RJ45

## 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速: 5G/2.5G/1G/100M

USB Plug and play upgrade your PC/Laptop to 5GbE 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

# QSW-M2116P-2T2S

## is your best choice!

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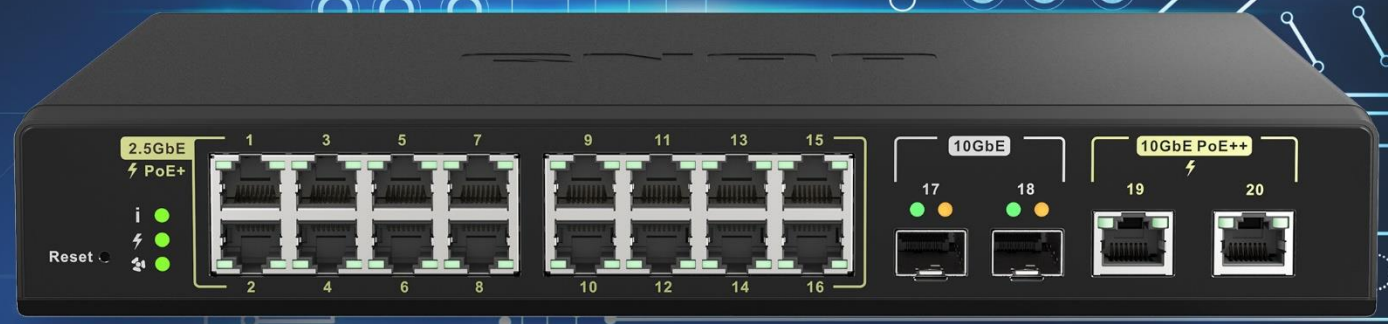
Full
**2.5GbE x 10GbE**
Managed

PoE++