QNAP

# QSW-IM1200-8C

## Industrial-grade fanless
## L2 Full 10GbE Managed Switch

Ensure high reliability in rugged environments

MARVELL

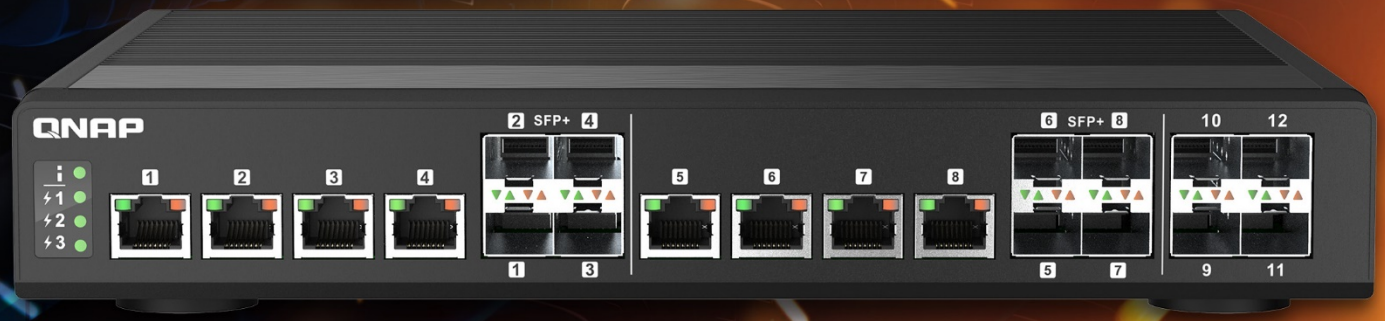
Industrial design

Fanless

Highest operation temperature -30°C-65°C

12 x 10GbE ports switch

Managed switch



# Industrial switch can be used in rugged environments, not only for industrial area

| | Server room of usual business office | Rugged environments |
|---|---|---|
| Air condition | Yes | None or not stable |
| Power | Yes and stable | Yes but not stable |
| Space for the switch | Well storage | Randomly space |
| Maintains people | Yes | Maybe not |

# New design of QSW-IM1200-8C start changing the concept of industrial switch, not only the industrial area needed industrial switch

- **Fan less and full cover of heatsink on the top of device**

  Well designed of heat dissipation, and fan less can exclude thermal issue caused  by fan.

- **Full 10GbE**

  10GbE SFP+/10GbE Combo let user easily to choose the connector.

- **Using QSS as usual**

  QSS can keep user easy of used,

  setup device quickly.

- **Multiple power input with 9~54V**

  Don’t need to worry about unstable power input.

# Where can QSW-IM1200-8C be installed?

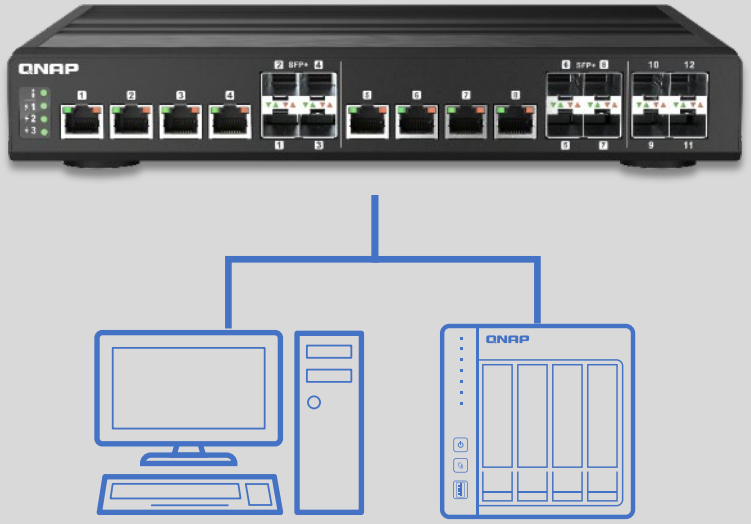
Not well with heat dissipated

Open area for storage

Outdoor space

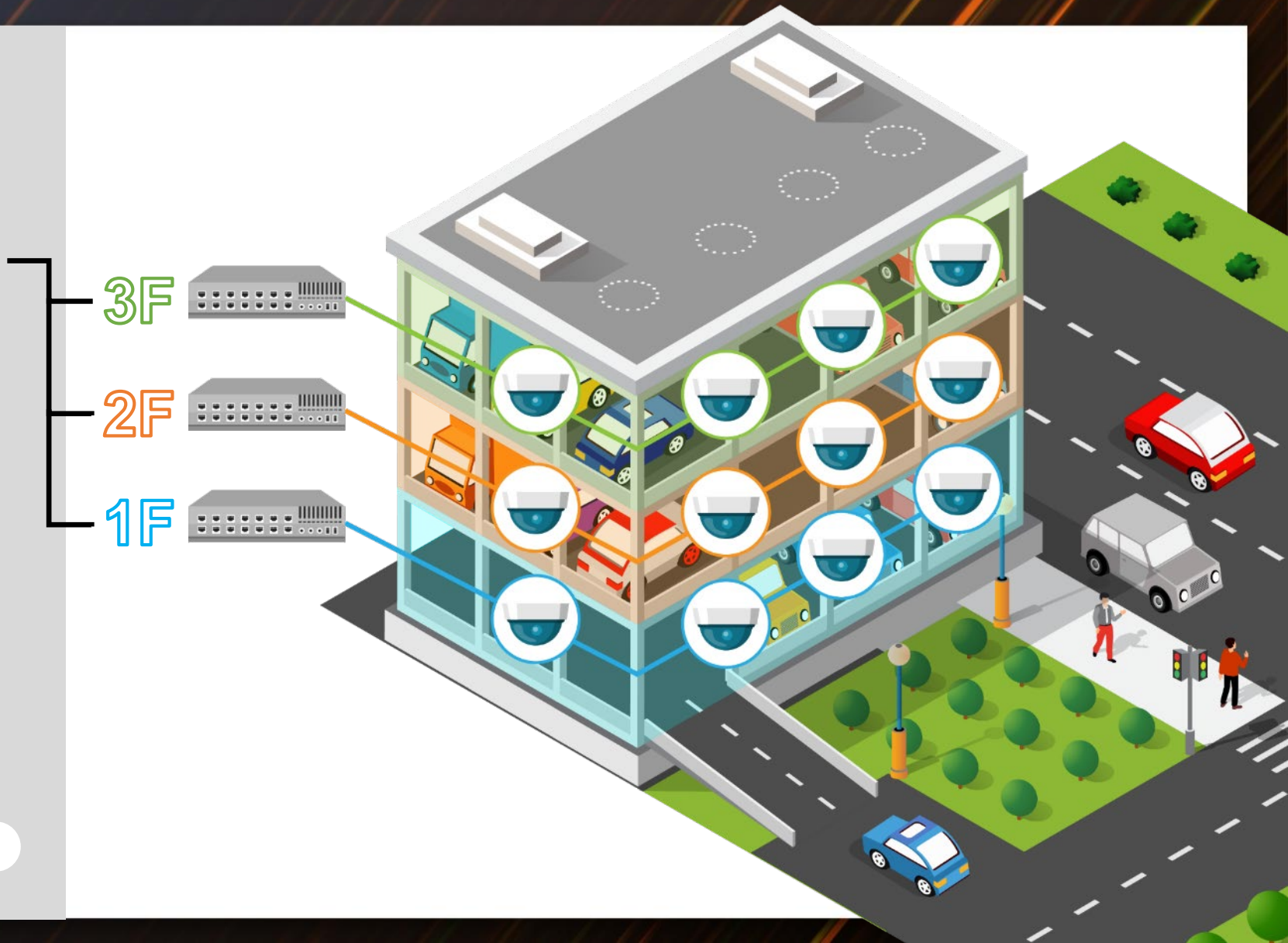
# Surveillance for open space, 10GbE can provide high speed network from control center to each sites

## Control center



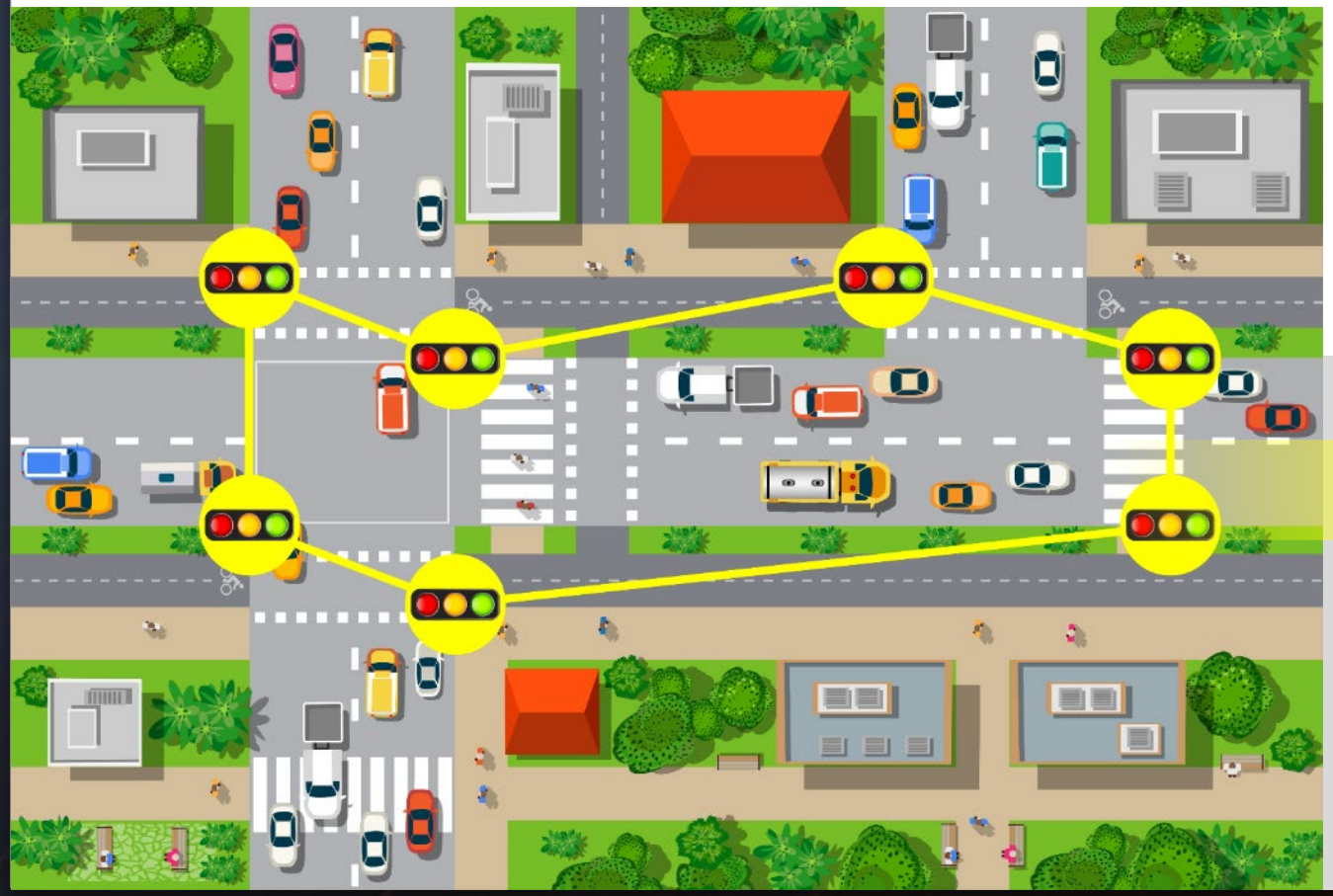

**Outdoor surveillance need high speed network for video transfer.**

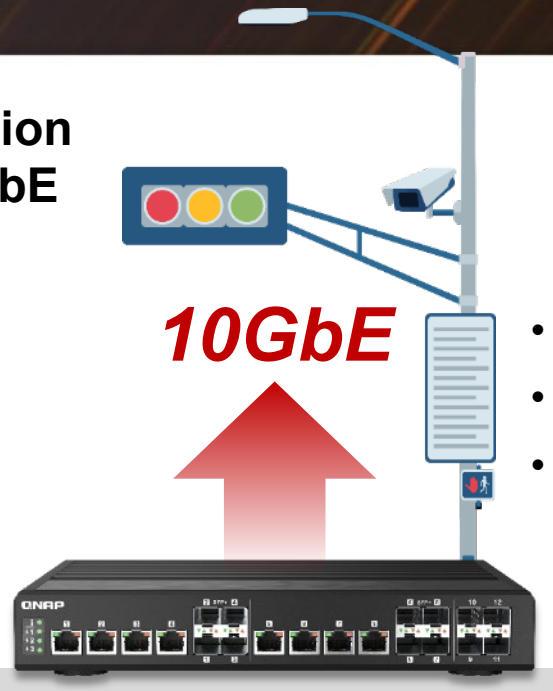
10GbE copper  10GbE Fiber



# Smart pole of smart city need 10GbE for high speed transfer

**Smart pole for the traffic, also need high speed connection back to control center, including different systems, 10GbE can make sure all the communication doing well.**

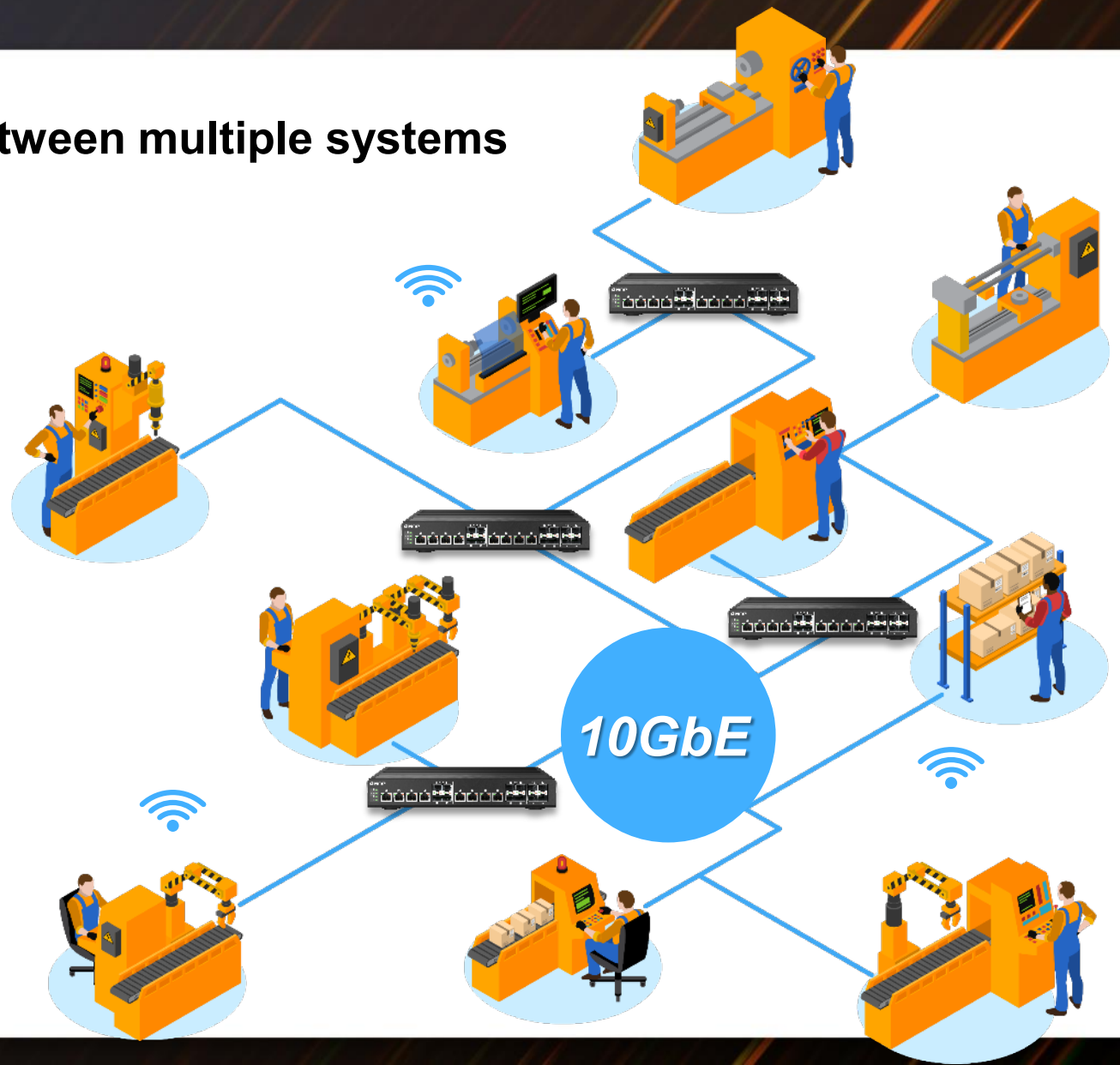




# 10GbE can help smart factory become much smart

**10GbE make connection smoothly between multiple systems**

- **AI robotic arm**
- **Automated Guided Vehicle(AGV)**
- **Wireless system**
- **Door/Access control**
- **Control center**
- **Surveillance**



QSW-IM1200-8C

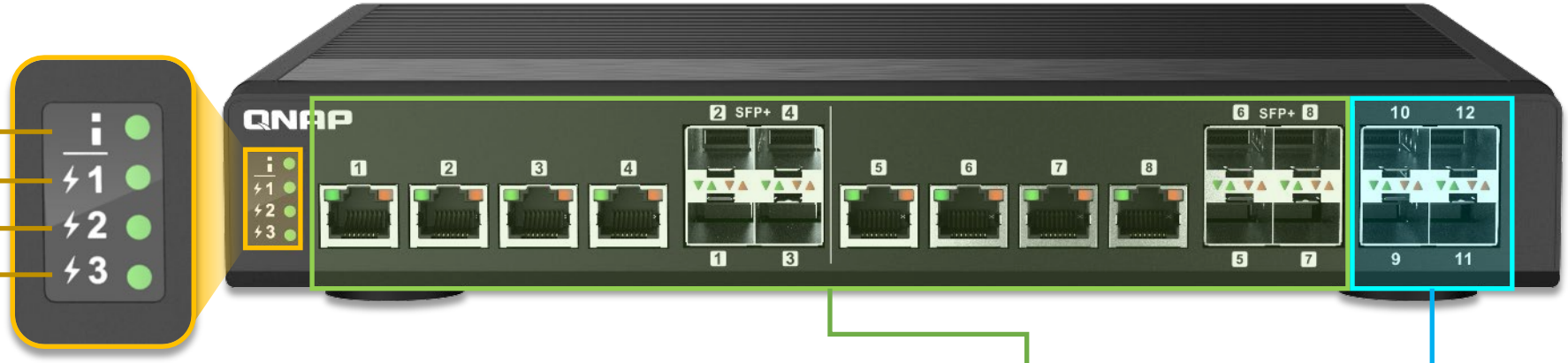
# QSW-IM1200-8C Hardware

# Device panel

## Front

Status LED

Power 1, Power 2
Power 3 status LED




## Back

**New power input design**

- Three DC in 9~54v
- Power circuit protection

# Fan less with large heatsink design

- **Don’t need worry about the reliability to the fan**
- **Serious thermal verification**

  Non natural convection operating temperature -30°C-45°C (-22°F –113°F)

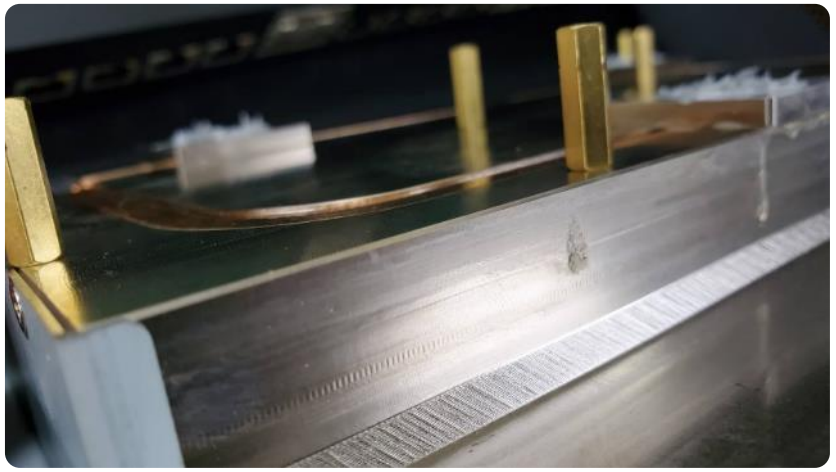
  Natural convection operating temperature (0.5~0.7m/s ) -30°C-65°C (-22°F –149°F)
- **Max working temperature of the housing**

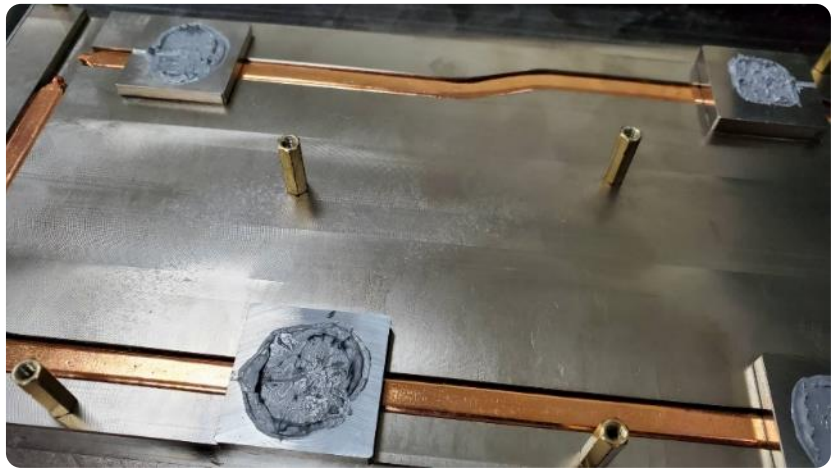
  Top 76°C(169°F)

  Bottom 78°C(172°F)

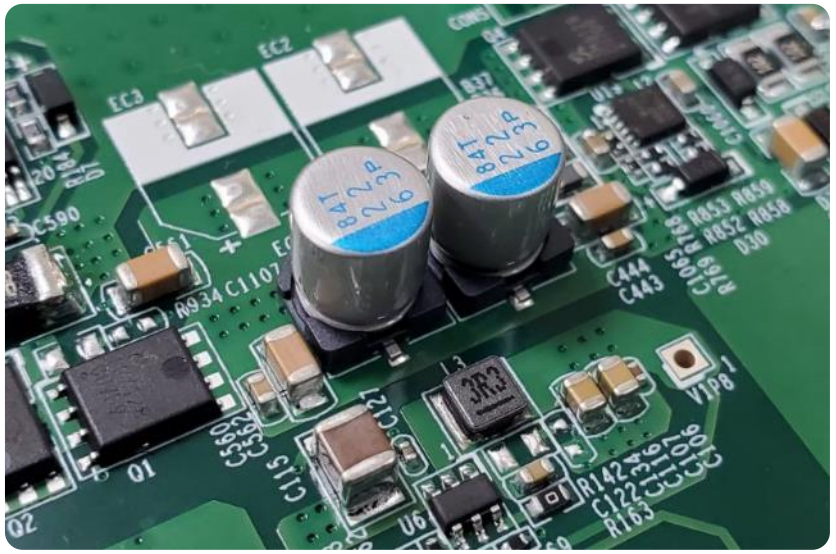
# Optimized thermal design & quality components

**Large conductive and directive heatsink**





**All solid capacitors**



# Industrial-Temperature range SFP+ for testing

LUXSHARE ICT

## SPECIFICATION

### PRODUCT FEATURES

- Hot Pluggable SFP+ form factor
- Supports 10.3125Gb/s
- Low Power Dissipation, Max 0.8W
- Operating Case Temperature: -40℃~85℃
- Up to 80m transmission with OM2 MMF
- Up to 300m transmission with OM3 MMF
- SFF-8472 Management Interface
- SFF-8432: Pluggable Module
- SFF-8431: General Electrical
- GR-468: Reliability Qualification
- IEEE 802.3ae: Physical Layer Specifications and Management Parameters
- ROHS-6: Environment Safety

### APPLICATIONS

- Ethernet for 10GBASE-SR
- InfiniBand QDR, DDR, SDR

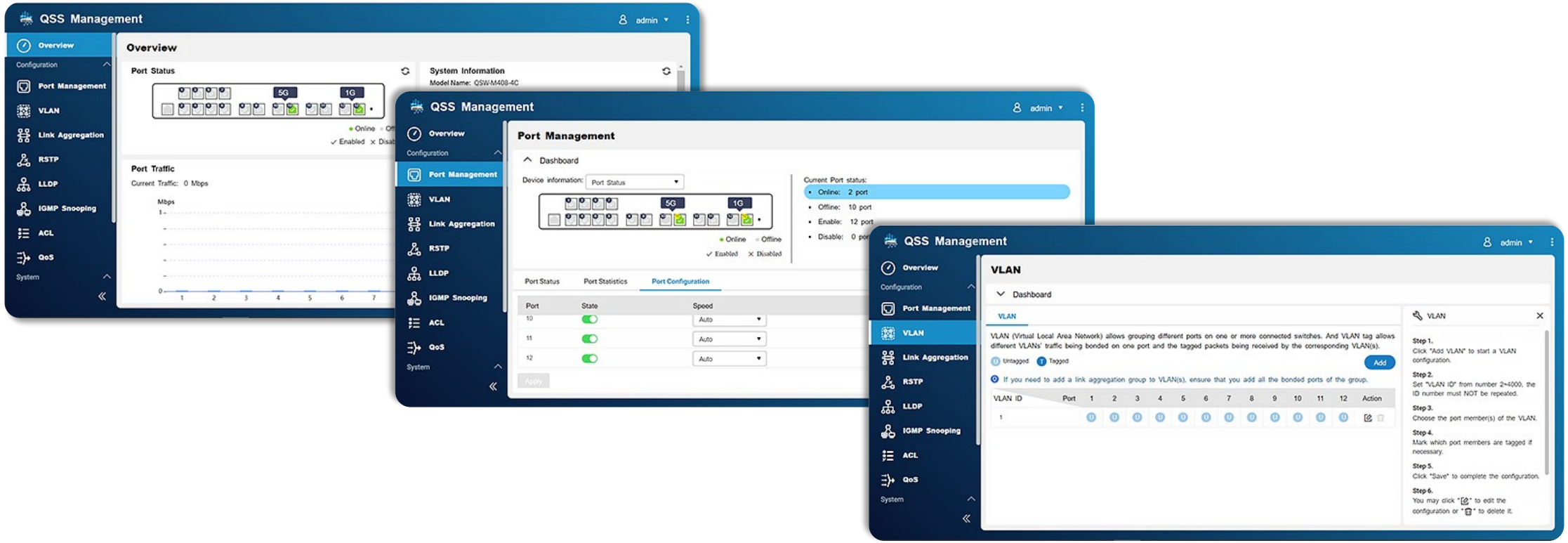
# QSW-IM1200-8C Software

# Rich management functions

- VLAN
- Link Aggregation Group (LAG)
- Rapid Spanning Tree Protocol (RSTP)
- Link Layer Discovery Protocol (LLDP)
- IGMP snooping
- Access Control Lists (ACL)
- Simple Network Time Protocol (SNTP)
- Quality of Service (QoS)

# Easy to use GUI design

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

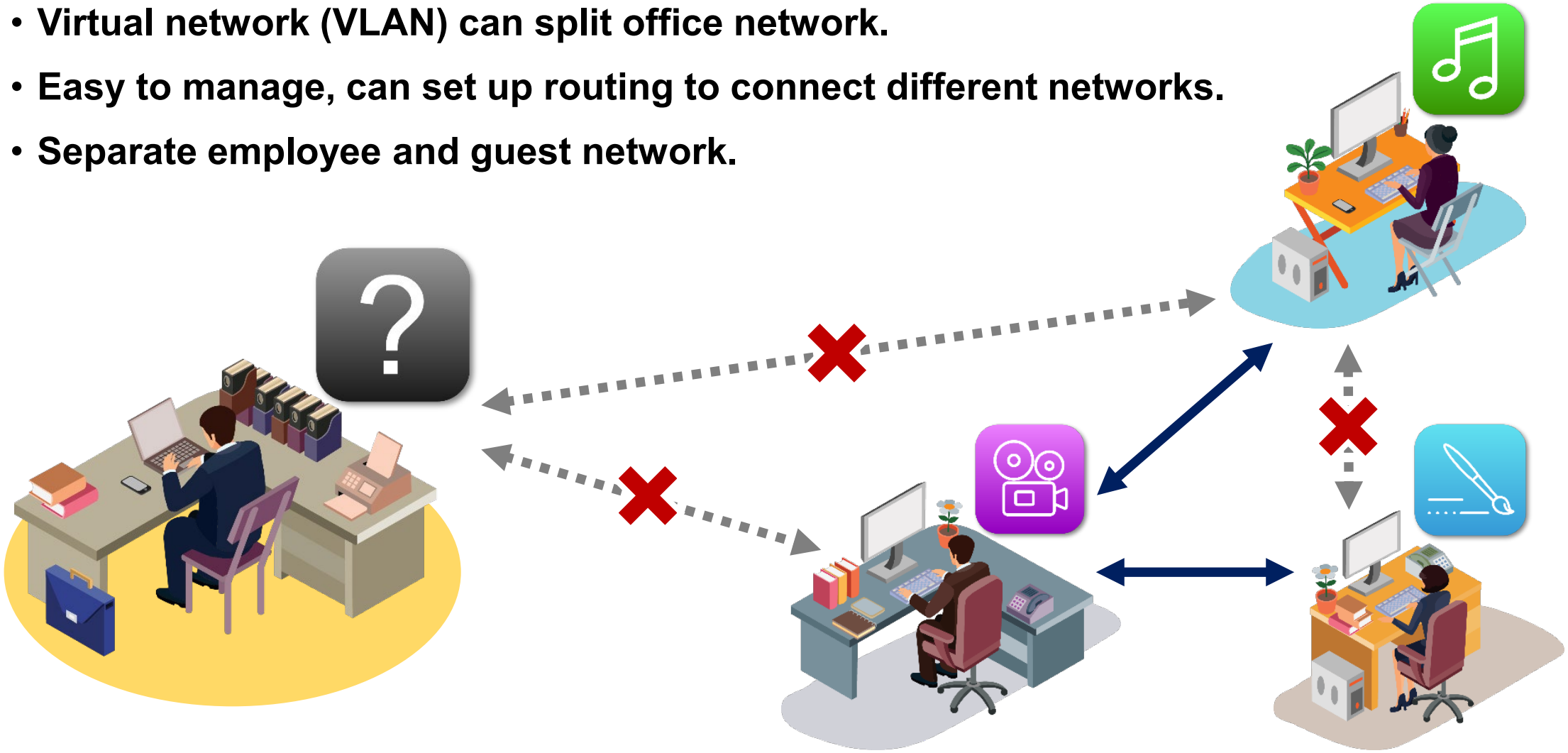


# Raise network speed with multiple network cable

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

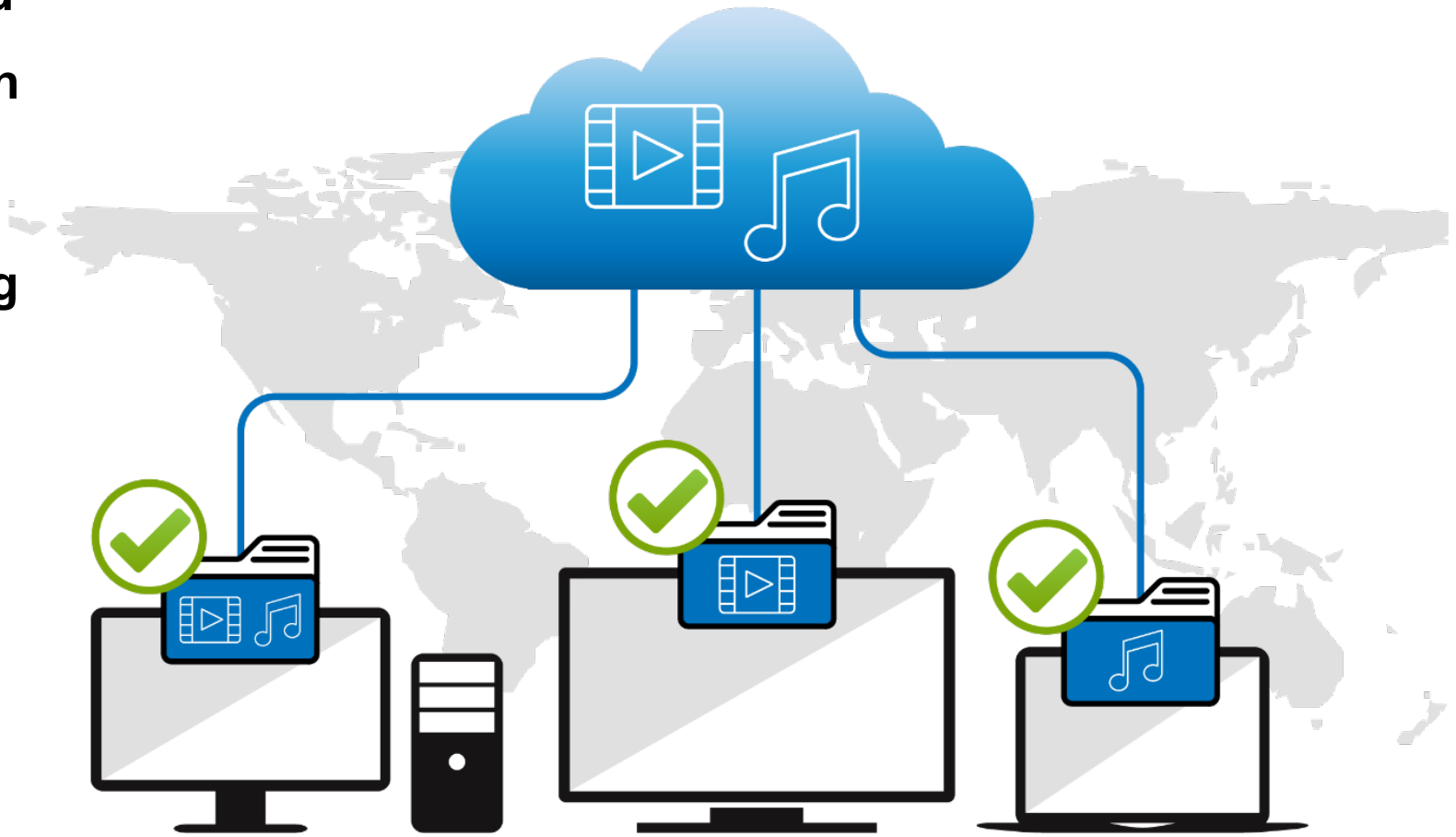
# Split office network into different area

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



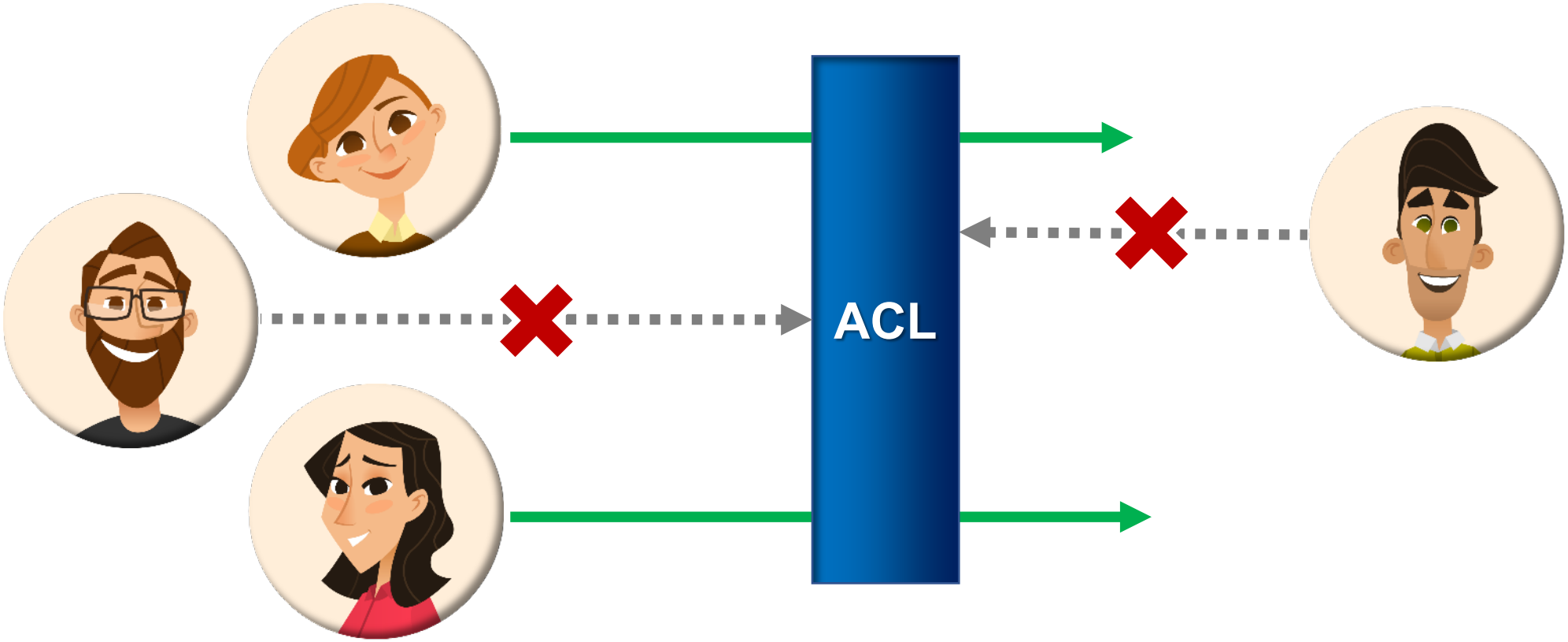
# Deliver streaming to dedicate device specificly

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



# Easy access control

- Access Control List (ACL) can control access specifically.
- To avoid security issue.

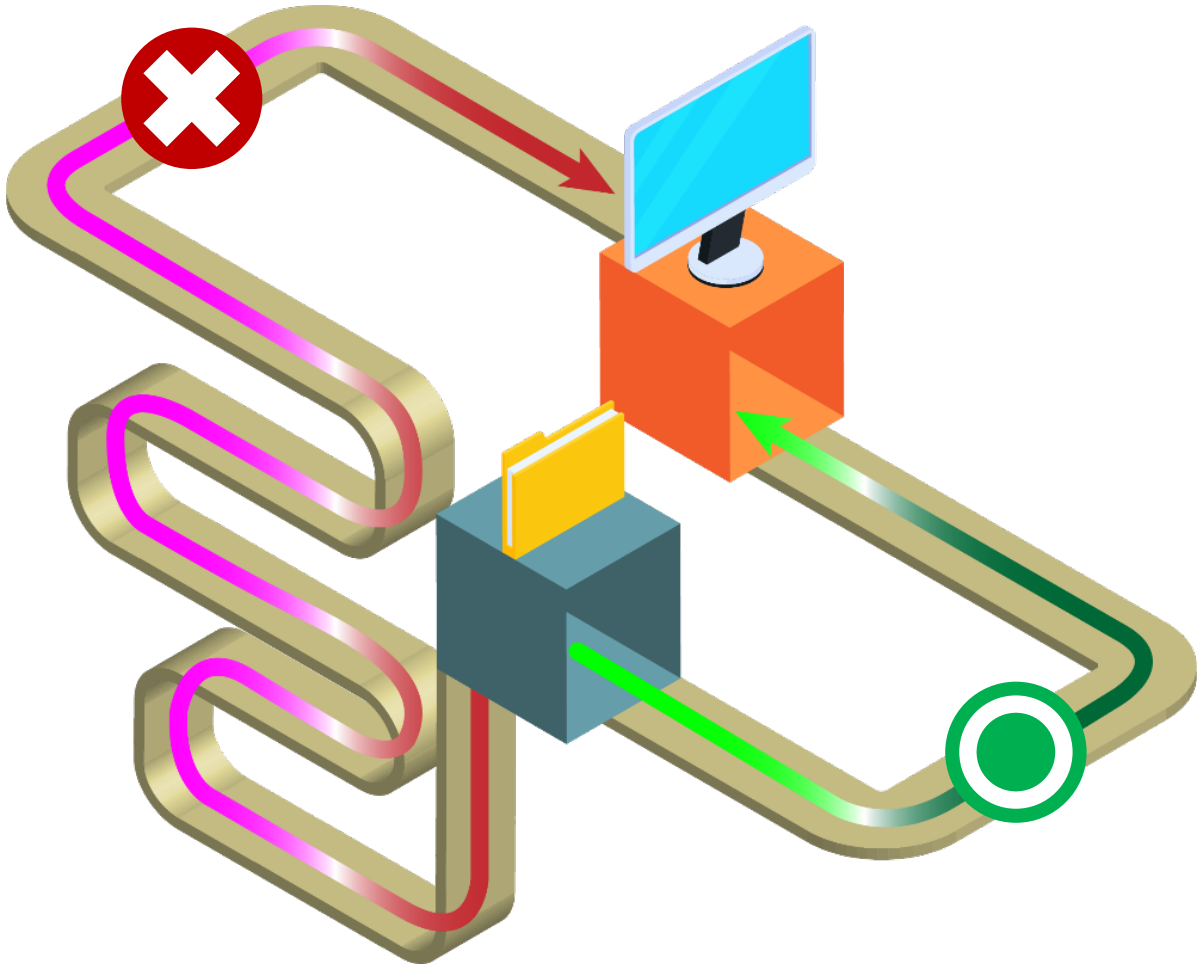


# Firmware version live check

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

# Always looking for best routing

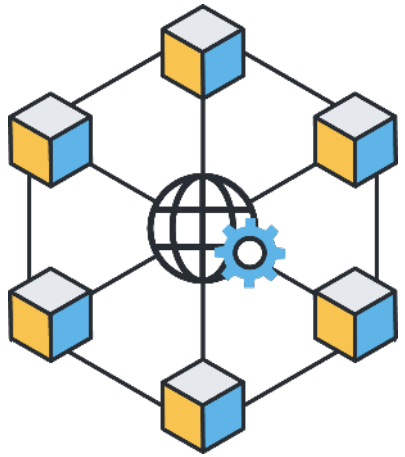
- Rapid Spanning Tree Protocol (RSTP) live check best networking route.
- Always using most effective route for data transfer.



# QSW-IM1200-8C has 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.



Network speed auto detect(Auto negotiation)，let devices can connect even in different network speed.

QSW-IM1200-8C

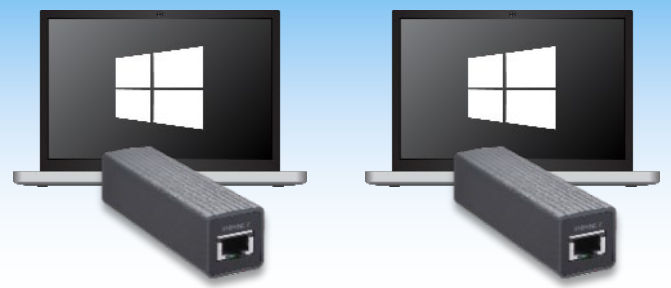
# Perfectly integrated with QNAP 10GbE products

# 12 port 10GbE combo port give flexiable deployed

**Embedded or extension 10G/5G/2.5G NAS**

**PC upgrade 2.5G/5G/10G**

**Laptop upgrade 5G**



Base-T / SFP+

Base-T

Base-T

**High speed network connect to NAS/Server**

SFP+

Base-T

**MacBook upgrade 10G**

# 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

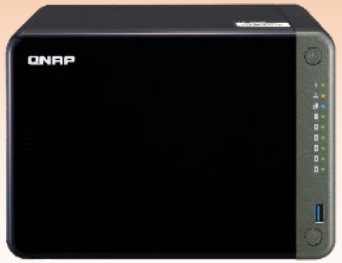
10GbE + 2.5GbE

## 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

# Rack mount network NAS with embedded 2.5/5/10GbE

## With 10GbE BASE-T & SFP+

QuTS hero edition
TS-h1283XU-RP

TS-h1283XU-RP

QuTS hero edition
TS-h1277XU-RP

TS-h977XU-RP
TS-h1277XU-RP

GM-1002/1002

TVS-x72XU

## With 2.5GbE BASE-T

TS-451DeU

TS-x73AU

TS-x53DU

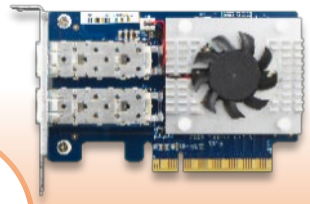
TS-x32PXU

+ 2x 10GbE SFP+

# Network extention：
# rich PCIe network extension card

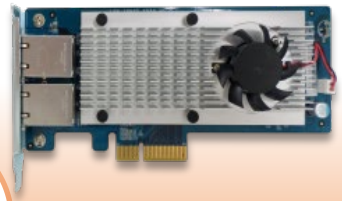
## 10GbE series

### QXG-10G2SF-CX4



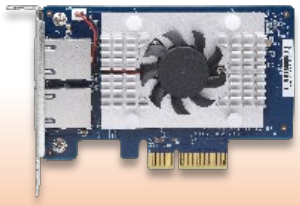
2 x SFP+

### LAN-10G2T-X550



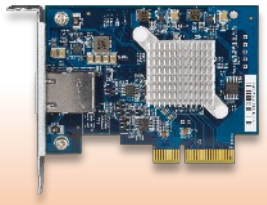
2 x RJ45

### QXG-10G2T-107



2 x RJ45

### QXG-10G1T



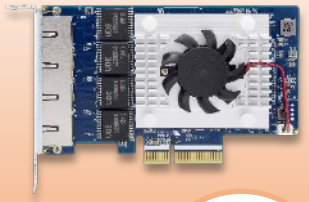
1 x RJ45

## 5GbE series

### QXG-5G Family

1 x RJ45

2 x RJ45



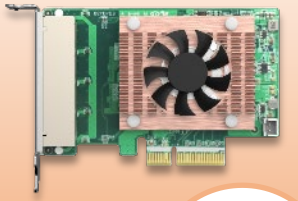
4 x RJ45

## 2.5GbE series

### QXG-2.5G Family

1 x RJ45

2 x RJ45



4 x RJ45

# Network extention：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

# QSW-IM1200-8C

## is your best choice!

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MARVELL

Industrial design

Fanless

Highest operation temperature 0°C-65°C

10GbE

12 x 10GbE ports switch

Managed switch