

QNAP

QNA-UC5G1T

USB 3.0 Type-C to 5G/2.5G/1G

QNAP Network Adapter

Easily add extra network
connectivity to your PC/NAS



QNA-UC5G1T



- 1 Enough speed?
- 2 Specs and applications
- 3 Add 5GbE to NAS



How slow is the 1GbE actually?

How long does it take to copy **300 GB** of videos?

1GbE

50 minutes

10GbE

5GbE

2.5GbE



4K



How to reduce the time ?



10GbE is no longer data center only

NAS and computers

10GBASE-T or 5GBASE-T



Apple iMac Pro



QNAP TS-963X



MSI GT75VR

Routers and switches

10GBASE-T or 5GBASE-T



Netgear Nighthawk AX12



QNAP QSW-804-4C

How can your computer effectively connect to the 5GbE and 10GbE environment?

Wired LAN port is being removed

Ultra-portable computers no longer have a wired LAN port and can only rely on wireless network. However, a USB port is still being preserved for connecting peripherals.



MacBook Pro



Surface Pro 6

Weak signal or need authentication in WLAN?



Wi-Fi signal is too weak or
the speed is too slow when
connected



You need credentials for
wireless network while the wired
network does not require it.

QNAP

QNA-UC5G1T

USB 3.0 Type-C to 5G/2.5G/1G

Overview and applications



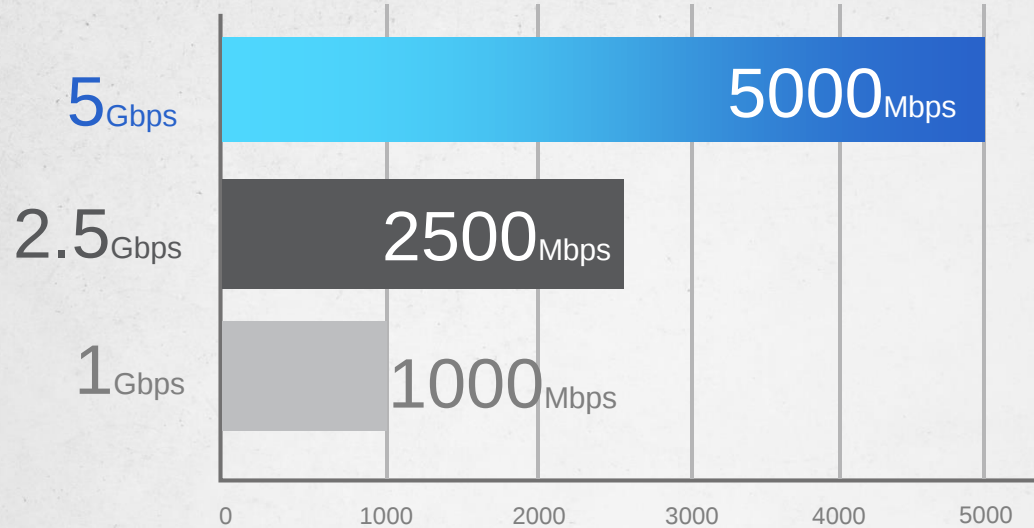
Small investment to go beyond 1Gbps

QNA-UC5G1T

USB 3.0 Type-C to 5GbE network adapter



Effectively use computer's USB 3.0 port for high-speed wired network



Aluminum alloy housing and fanless;
Quiet and just slightly warm during transfer

USB 3.0 Type-C for easy installation



Includes 20cm (0.66 ft.) USB 3.0
Type-C to Type-A cable



Optional USB Type-C to
USB Type-C cable



Windows PC



MacBook Pro



QNAP NAS



Package contents and accessories

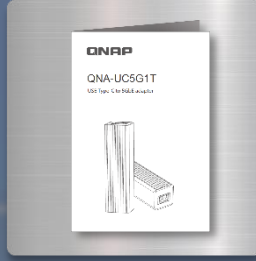
Included



QNA-UC5G1T
USB 3.0 to
5G/2.5G/1G/100M
network adapter



**20cm USB 3.0 Type-C
to Type-A cable**
Ordering P/N :
CAB-U35G02MAC



**Quick
installation
guide (QIG)**

Optional



**100cm USB 3.0 Type-C
to Type-A cable**
Ordering P/N :
CAB-U35G10MAC

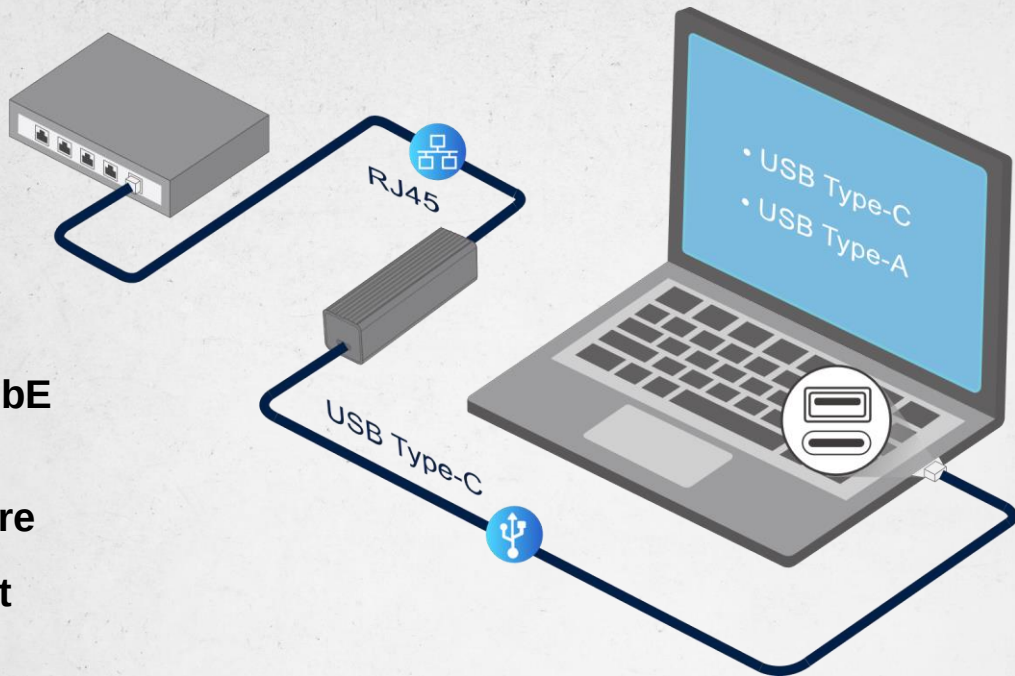


**100cm USB 3.1 Gen2
Type-C to Type-C cable**
Ordering P/N :
CAB-U310G10MCC

No extra power supply needed

QNA-UC5G1T USB 3.0 to 5GbE

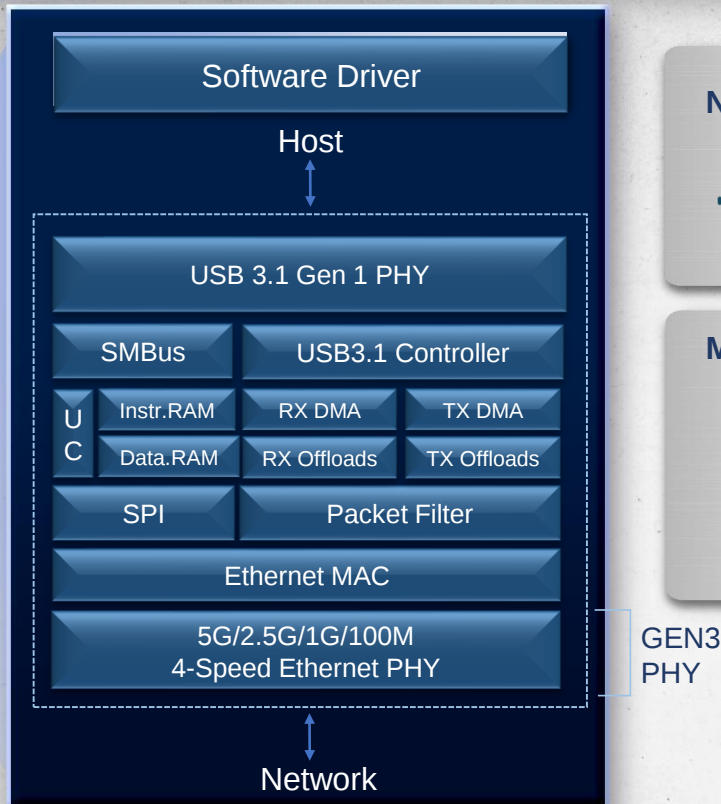
- Save cost and easily build 5GbE/2.5GbE environment
- Portable size for productivity anywhere
- Clean design to fit in any environment



AQC111U : USB and 5G single chip solution

AQUANTIA®

AQUANTIA



NBASE-T Alliance



Multi-Gig supporters



Upgrade to 2.5G & 5G with existing cable wiring

No need to re-wire your cables, the existing wiring already support up to 5Gbps.

Your existing cables already support
Multi-Gigabit NBASE-T standard

	CAT 5e	CAT 6	CAT 6A
100M	✓	✓	✓
1G	✓	✓	✓
2.5G	✓	✓	✓
5G	✓	✓	✓

Speed:

5G = Green

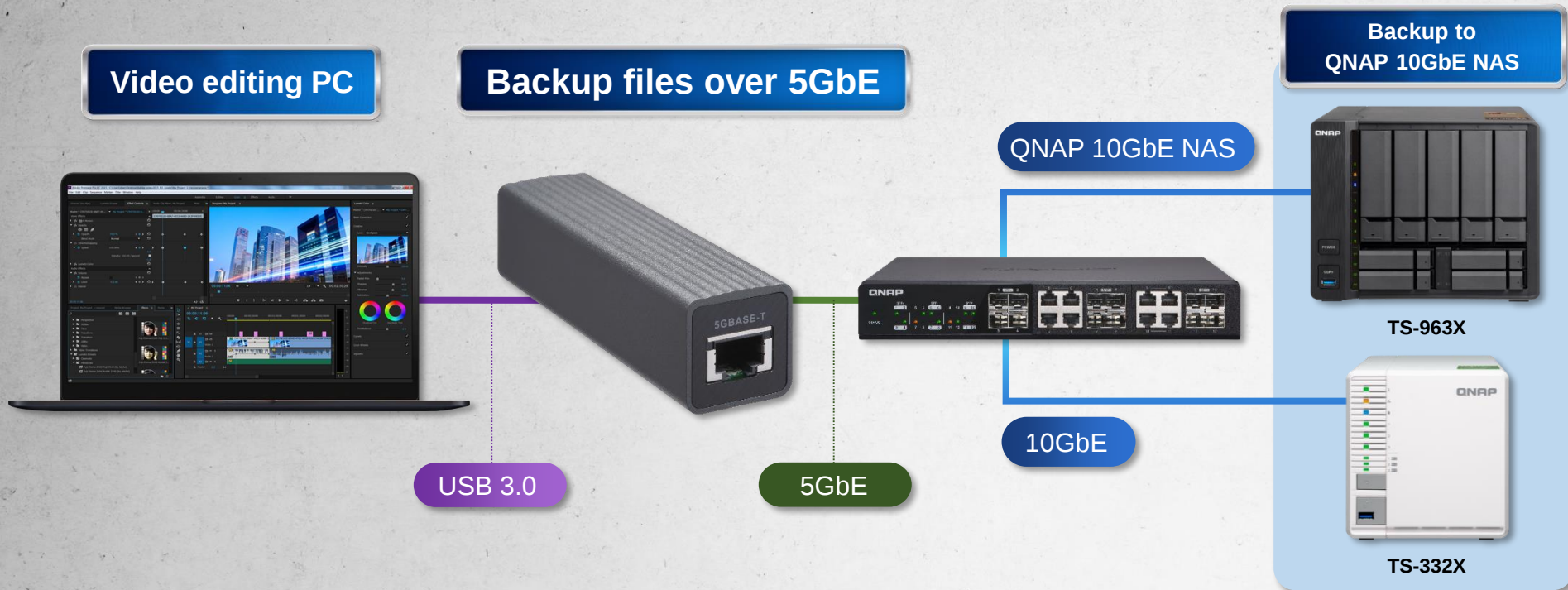
2.5G/1G/100M = Amber



Link/Act
LED



Application: USB to 5GbE backup



Up to 100M long distance at 5GbE

40 °C (104 °F)
Up to **100M** cabling



May also depend on the switch capability.



Get your LAN party started fast and easy

Low latency

High bandwidth



Support Windows, macOS, Linux OS.



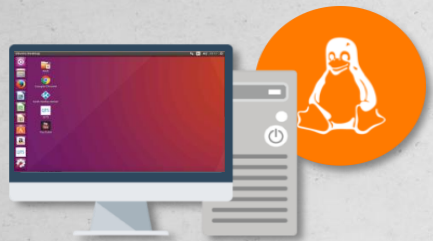
Windows® 10, 8.1, 8, 7 (32/64 bit)

Install QNAP driver



macOS X with native support

Coming soon from Apple! Follow QNAP product page for official support status



Linux kernel 4.4, 4.2, 3.12, 3.10, 3.2

Windows PC installation



Windows® 10, 8.1, 8, 7 (32/64 bit)

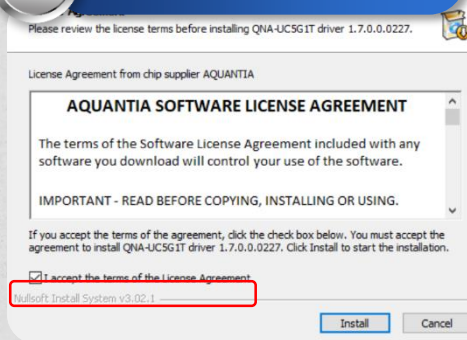
When connecting the QNA-UC5G1T to a computer that has no driver, the Windows File Explorer will show a virtual CD-ROM device which contains the driver installation program. You can download the latest driver file from <https://download.qnap.com>

1

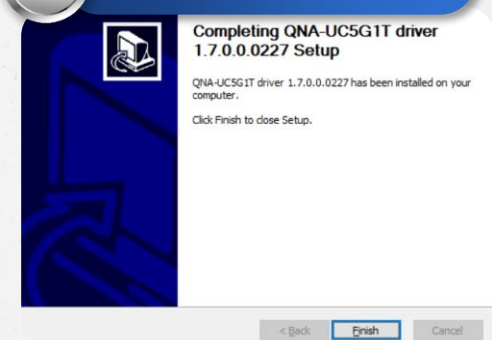
View the software license agreement

**2**

Agree to the software license

**3**

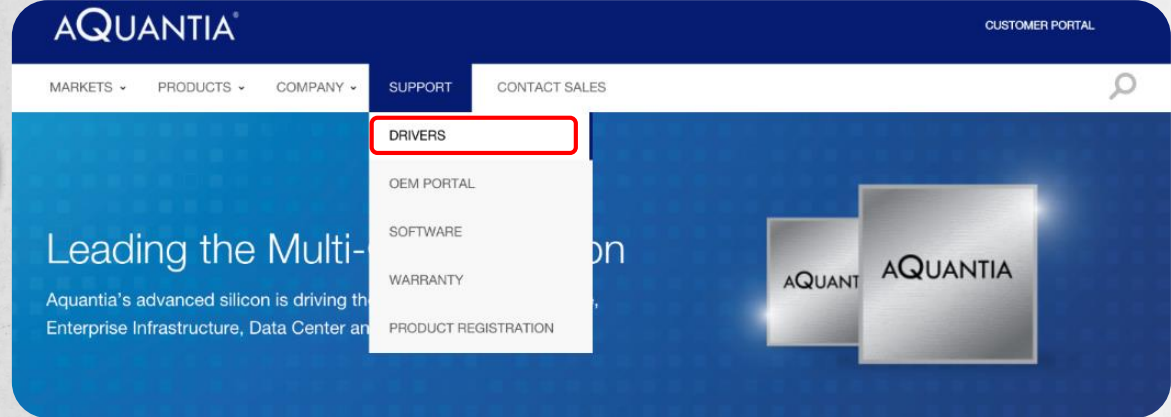
Finish driver installation



Linux PC installation

Download the AQC 111U Linux driver from Aquantia website
Linux kernel 3.2, 3.10, 3.12, 4.2, and 4.4

<https://www.aquantia.com/support/driver-download/>



4 times faster than 1GbE

Windows file transfer



* Please set the Jumbo Frame to be MTU 9000 for the best performance

Test environment :

Two Windows PCs with QNA-UC5G1T

Client PC: Windows 10 Pro, Intel Core i7-6770 3.40GHz, 64GB RAM, QNA-UC5G1T USB adapter, MTU 9000



Demo

Performance test
with 2 Windows PCs



Older Mac gets 5GbE via the QNA-UC5G1T

Older Mac with Thunderbolt 2



Install **QNA-UC5G1T** on a USB 3.0 port to break the 1GbE barrier



macOS X will soon support it

Follow the QNAP product page for the latest announcement

How to get high speed for Mac with Thunderbolt 3

MacBook Pro
4 x Thunderbolt 3 ports



Video editing



iMac
2 x Thunderbolt 3 ports



Thunderbolt 3 to 10GbE is here

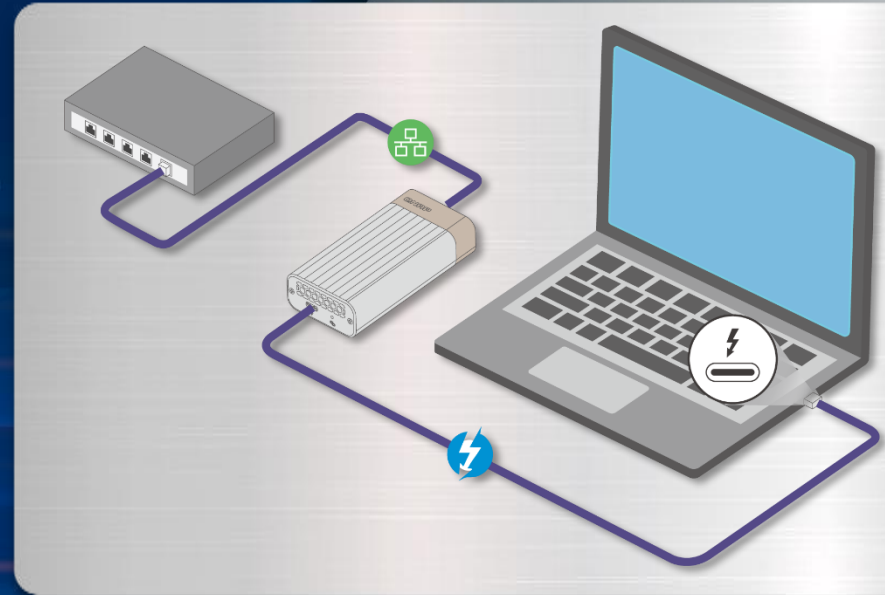
QNAP Thunderbolt 3 to 10GbE adapter

QNA-T310G1T

QNA-T310G1S

Cost-effective Thunderbolt 3 to 10GbE adapter that empowers your Mac® or Windows® computers with blazing-fast 10GbE network connectivity using a Thunderbolt 3 Type-C port

- Reduce the cost for building 10GbE environment
- Portable design meets the flexible working conditions
- Sleek design



Thunderbolt 3 QNA series for 10GbE

QNA-T310G1T



10GbE NBASE-T RJ45 port

10Gbps/5Gbps/2.5Gbps/1Gbps/100Mbps multi-gigabit

QNA-T310G1S



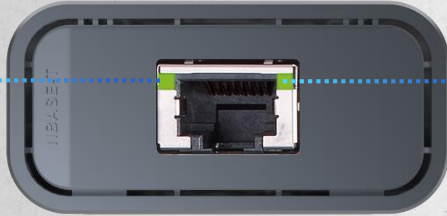
10GbE SFP+ port

10Gbps

Power and speed indicators

QNA-T310G1T

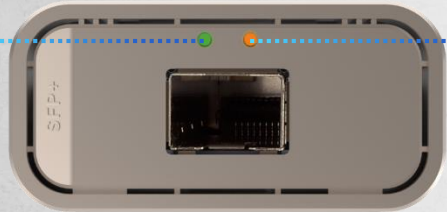
Speed:
10G = Green
5G/2.5G/1G/100M = YLW



Link/Act LED

QNA-T310G1S

Speed:
10G = Green



Link/Act LED



Power

Driver built-in for macOS - plug & play

QNA-T310G1T

QNA-T310G1S



macOS 10.13.3 (or later)
Built-in driver for plug & play

MacBook Pro



Driver installation required

QNA-T310G1T: AQC107

QNA-T310G1S: AQC100

Windows

* QNAP NAS with QTS 4.4.1 will officially support the QNA series.

Enable blazing-fast 10GbE connectivity

File transfer (1 x 10GbE)



* Please set Jumbo Frame to MTU 9000 for optimal performance.

10GbE Transfer

Test environment :

Server NAS : TS-677, QTS 4.3.4, , AMD Ryzen 5 2600, 3.40 GHz, 8GB RAM, RAID5, Samsung SSD 850 PRO 512GB *6, QXG-10G1T & LAN-10G2SF-MLX,

Client PC : Windows 10, Intel Core i7-4770 3.40GHz, 32GB RAM, LAN: Thunderbolt 3, MTU9000



QNAP

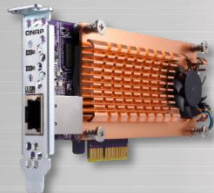
QNA-UC5G1T

High speed transfer with NAS

NAS to NAS application
VJBOD (iSCSI JBOD)



Upgrade PC & NAS to 10GbE with QNAP PCIe adapters



- QM2-2S10G1T (2 x M.2 SATA SSD port)
 - QM2-2P10G1T (2 x M.2 PCIe NVMe SSD port)
- 2-port M.2 2280 SATA/NVMe SSD with 1-port 10GbE adapter



- QXG-10G1T
- 1-port 5-speed 10GbE adapter (10G/5G/2.5G/1G/100M)

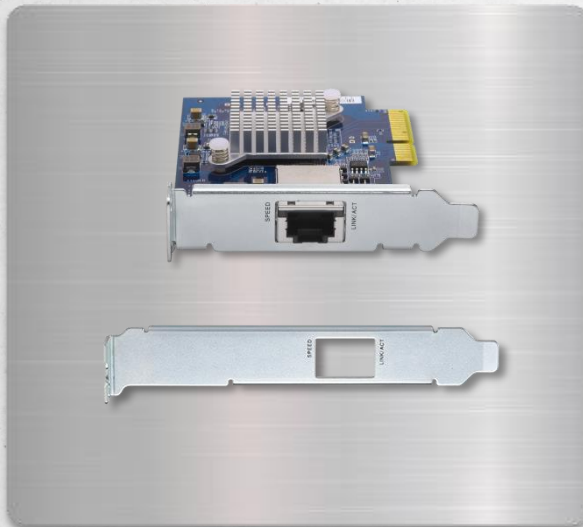
Easy to install a 10GbE PCIe adapter

1 Confirm the bracket type

E.x. TS-x77 series PCIe slot 1
requires a full-height bracket



2 Change the bracket



3 Install QXG-10G1T to NAS



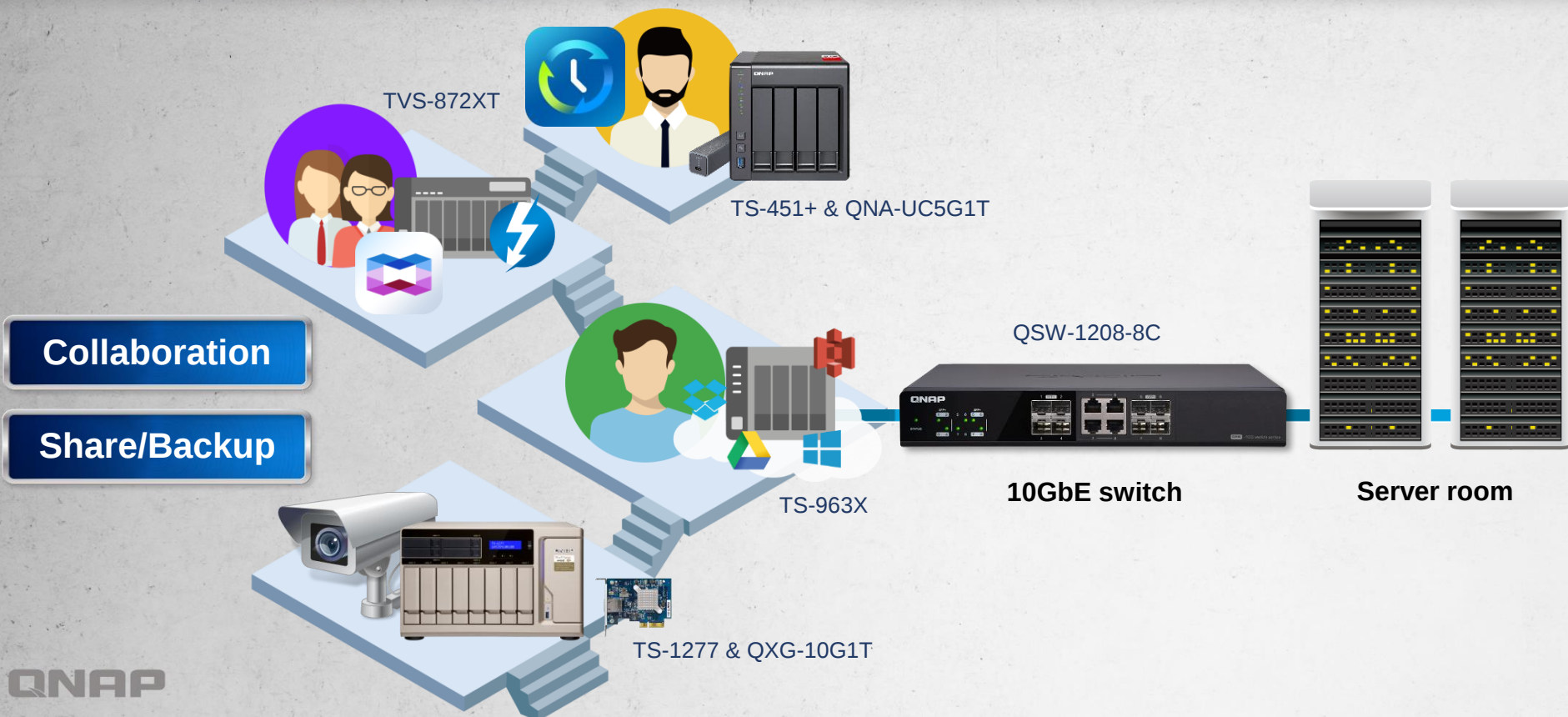
Support all NAS with USB 3.0 and QTS 4.3.6



View the complete list of supported NAS models <https://www.qnap.com/en/product/eol.php>

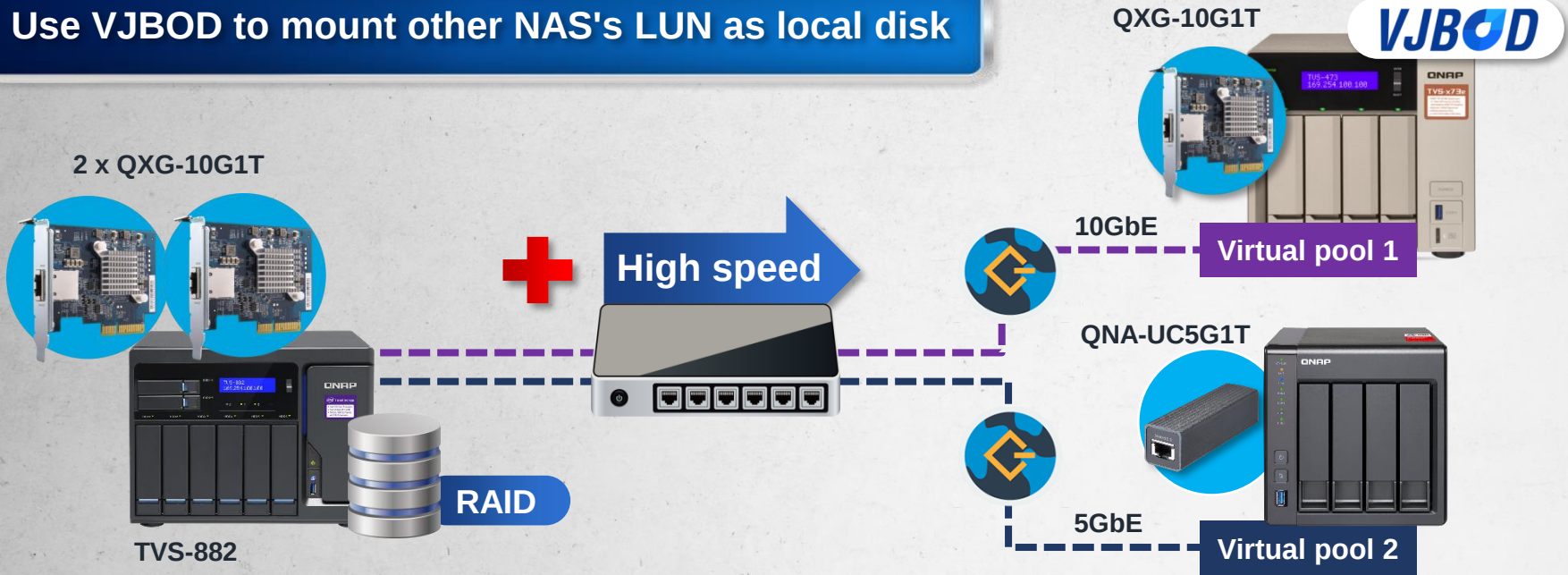


Speed up file sharing between workgroups

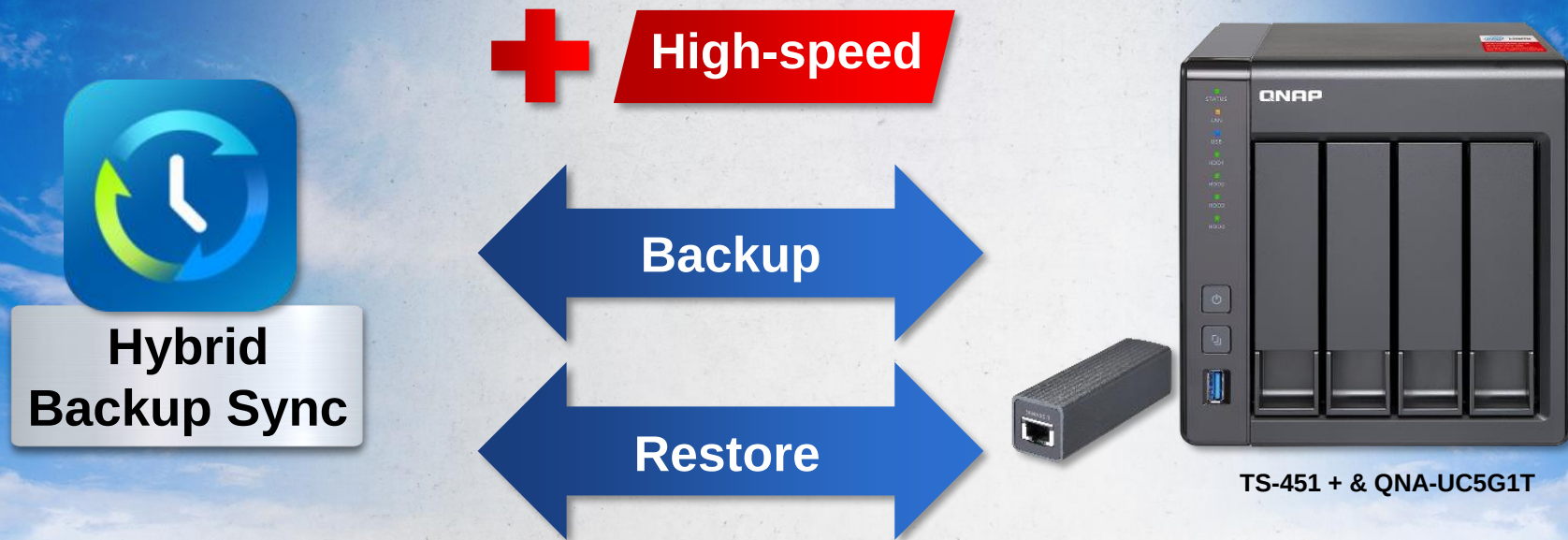


Mount huge storage space with VJBOD

Use VJBOD to mount other NAS's LUN as local disk



Business-grade 5GbE disaster recovery solution



Connect PC and NAS with QNA-UC5G1T

1

Modify interface settings

Internet Protocol Version 4 (TCP/IPv4) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☐ Obtain an IP address automatically

☒ Use the following IP address:

IP address: 169 . 254 . 100 . 101

Subnet mask: 255 . 255 . 0 . 0

Default gateway: . . .

☐ Obtain DNS server address automatically

☒ Use the following DNS server addresses:

Preferred DNS server: . . .

Alternate DNS server: . | . .

☐ Validate settings upon exit

2

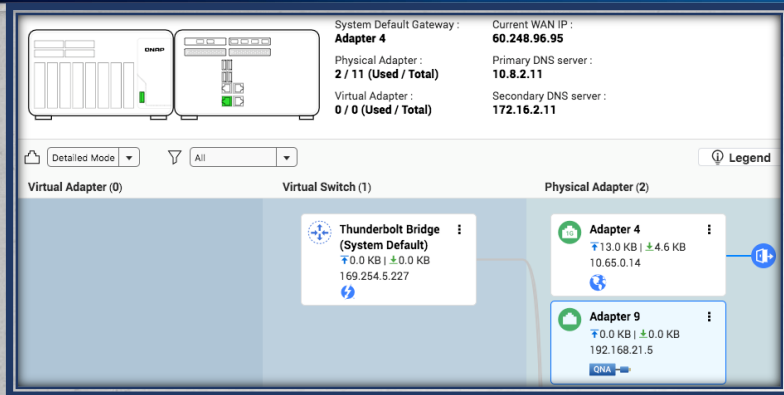
Use Qfinder Pro

Login Network Drives Media Upload Configuration

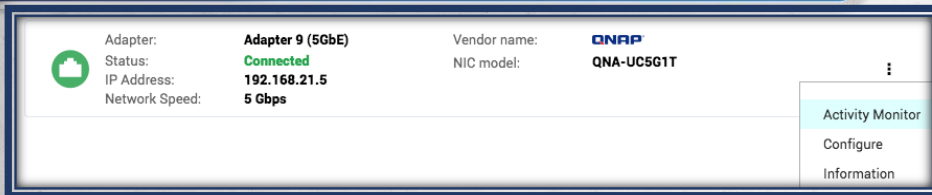
Bookmark	Name	IP Address	Type
★	Alan871	169.254.100.100	

Manage multiple NICs in Network & Virtual Switch

1 Check the topology in **Network & Virtual Switch**



2 Edit each **NIC** directly



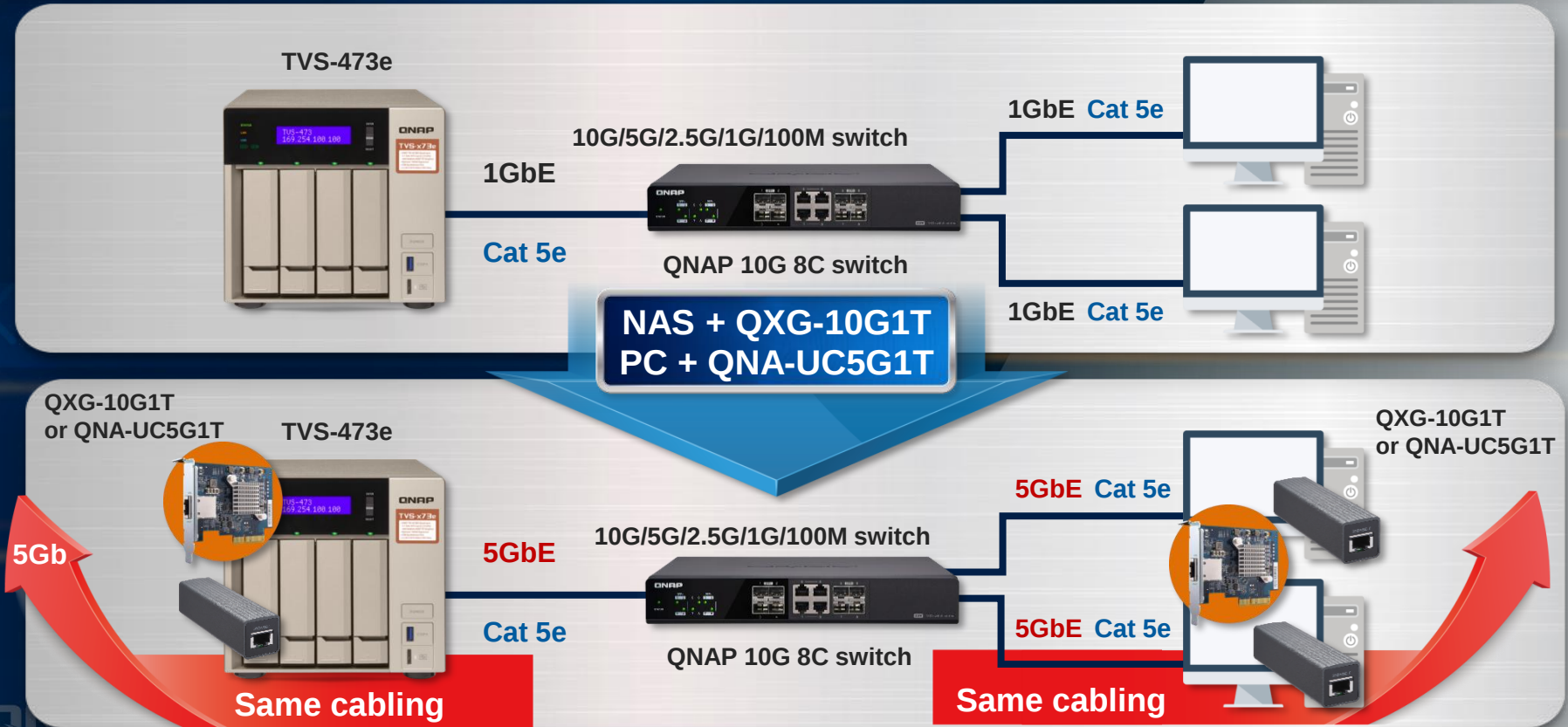
QTS does not support the following functions when a QNA device is connected:

- Port trunking
- DHCP server
- RADVD server
- Static route

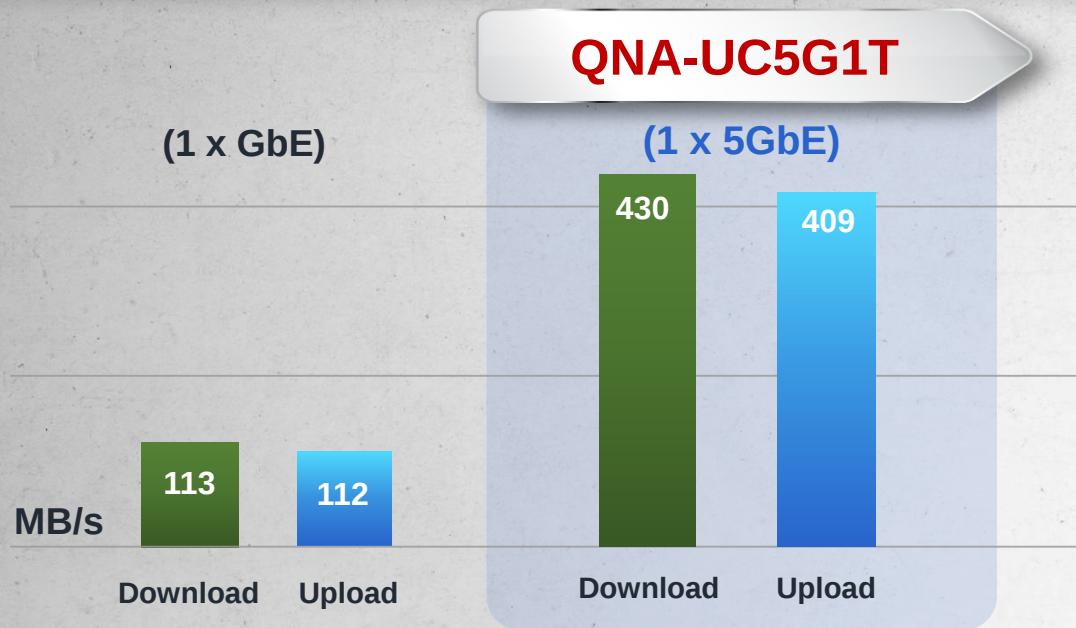
x2



Upgrade from 1G to 5G with the minimum cost



10GB file transfer on NAS



Test environment

NAS: TVS-1282, QTS 4.3.6

Volume type: RAID 0 w/ 2 x Samsung 860 Pro 512GB SSD

Client PC:

Intel® Core™ i7-6770 3.40GHz CPU; 16GB RAM; QNA-UC5G1T NIC ;

Windows® 10 Pro 64-bit; 10GB file transfer by Robocopy



NAS + QNA-UC5G1T

Demo

Performance test
with NAS



QNA series for 5GbE and 10GbE

QNA-UC5G1T



Host with USB 3.0

5G/2.5G/1G/100M 4 speeds
RJ45 NBASE-T connector

QNA-T310G1S



Host with Thunderbolt 3

10G/5G/2.5G/1G/100M 5 speeds
RJ45 NBASE-T connector

QNA-T310G1T



Host with Thunderbolt 3

10G speed
SFP+ connector

QNAP

QNA-UC5G1T

Let USB 3.0 high again

USB 3.0 Type-C to 5G/2.5G/1G/100M
Multi-Gigabit network adapter

