


Q-Track Quick Start Card

Thank you for purchasing Quanergy's Q-Track LiDAR sensors. This card summarizes essential instructions for setting up and using the Q-Track LR, Q-Track HD, and Q-Track Dome sensors.

Sensor Overview

Q-Track is a LiDAR-based solution that provides 3D perception and volumetric sensing. This system detects, tracks, and classifies (DTC) person and vehicle objects for use in security, smart cities and spaces applications. The Q-Track server interfaces with Quanergy Q-Track sensors and generates a real-time list of tracked objects that is accessible through the Q-Track API. The Q-Track client provides visualization and configuration of the Q-Track server

Note: *Do not disassemble or modify the sensor.*
Unauthorized tampering voids the warranty.

Required Items

Quanergy Components

- **Q-Track LR**, **Q-Track HD**, or **Q-Track Dome** sensors
- Dust cap for Q-Track LR female Ethernet connector (N/A for Q-Track Dome/HD)
- Connector cover for optional Ethernet cable modifications for Q-Track LR (N/A for Q-Track Dome/HD)
- Q-Track Software License
- Q-Track Server & Client package or executable files
- Q-View package or executable file

Additional Items (User-Provided)

- PoE+ (IEEE 802.3at) compliant power source equipment (PSE)
- Male CAT6 Ethernet sensor cable for **Q-Track LR**
- Female CAT6 Ethernet sensor cable for **Q-Track Dome** & **Q-Track HD**
- **PC/Server**: Linux® Ubuntu® 20.04 LTS Certified or Windows® 10/11 PC to run Q-View™ and Qortex DTC software.

Q-View

Ubuntu

1) Download the Q-View installer package to the Ubuntu host computer /Downloads directory.
a) On the Quanergy Download Center URL, https://downloads.quanergy.com/#qview, click to agree to licensing terms.
b) Click the Ubuntu link and download the Q View Debian package, quanergy-qview_1.x.xxx_amd64.deb. Where x.xxx is the release number.
2) Open a new terminal on the host computer.
3) In the terminal window, run the installer from the download directory:
a) `$ cd ~/Downloads` (or to wherever you saved the package)
b) $ sudo dpkg -i quanergy-qview_1.x.xxx_amd64.deb (where x.xxx is the release number)
4) Start the Q-View application, run the command.
a) `$ /opt/quanergy/Q-View/Q-View`

To quit Q-View, click the red Close button in the upper right corner of the window.

Note: Remove old versions before installing new
To remove old versions of Q-View, run the command
$ sudo dpkg -r <package-name>

Windows

1) Download the Q-View installer package to the Windows host computer /Downloads directory.
a) On the Quanergy Download Center URL, https://downloads.quanergy.com/#qview, click to agree to licensing terms.
b) Click the Windows link and download the installer, Q-View-1.x.xxx-win64.exe. (where x.xxx is the release number).
2) Start the Q-View installer.
a) Locate the installer file you downloaded. Double-click on the file to begin the installation process and follow the on-screen instructions.

Start the Q-View application, Double-click the Q-View icon.
To quit Q-View, click the red Close button in the upper right corner of the window.

Note: Old versions will automatically be
removed before new versions are installed

Sensor Setup

Mounting

1) Use the M5 threaded holes or the 1/4-20 threaded center hole to securely mount the sensor on a Quanergy Mount or stable surface.
2) Observe all safety guidelines during installation.

Network Connection

MQ-8 Sensor Default IP: 192.168.1.3
Q-Track HD and Q-Track Dome Default IP: 192.168.1.200

Connecting

1) Connect the Ethernet cable to the sensor and the PSE.
2) Ensure the PSE and host computer are on the same network.
3) Attach the Ethernet cable to the network port on the host computer.

Configuring Network & IP

Q-Track LR

Open your computer's network preferences:
a) **IP Address**: 192.168.1.x (where x = 7-254, avoiding conflicts)
b) **Subnet Mask**: 255.255.255.0
c) **Router Gateway**: 192.168.1.1
2) Access the sensor's web server:
3) Log in with the username editor and the sensor's serial number as the password.
4) Select **Settings > Edit Network Settings**:
a) For **Dynamic IP**: Select the *Dynamic* radio button.
b) For **Static IP**: Choose *Static*, input the desired IP (ensuring no conflict with other devices), then select **Submit > Reboot**.

Q-Track HD & Dome Open your computer's network preferences:

a) **IP Address**: 192.168.1.102
b) **Subnet Mask**: 255.255.255.0
c) **Router Gateway**: 192.168.1.1
2) Add the sensor on the Q-View software
3) Make a connection to the sensor
4) Click on the info button for the sensor
5) Input the desired IP (ensuring no conflict with other devices)

Qortex DTC Installation

Requirements for Operation

Install all hardware on the same local Ethernet subnet, connecting via TCP/IP protocol!

- Install the Q-Track server on a computer with an Ubuntu® 20.04™ OS or Windows 10/11. The Q-Track server supports statically installed LiDAR sensors that are running at a configurable frame rate of 5-20 hertz.
- Install the Q-Track client on a computer with Ubuntu® 20.04™ OS or Windows 10/11. We recommend installing the Q-Track server and client on separate computers, though they can be on the same computer.
- For minimum specifications and other setup recommendations, see the Q-Track User Guide. Find Q-Track and Q-View user guides at https://downloads.quanergy.com/.

Ubuntu

Server

1) Download the Qortex DTC installer package to the Ubuntu host computer /Downloads directory.
a) On the Quanergy Download Center URL, https://downloads.quanergy.com/#qortex, click to agree to licensing terms.
b) Click the Server: Ubuntu link and download the Qortex DTC Server Debian package, qortex-server_2.x.xxx_amd64.deb. Where x.xxx is the release number.
2) From a terminal on the host computer, run the commands
a) `cd ~/Downloads` (or to wherever you saved the package)
b) `$ sudo dpkg -i qortex-server_2.x.xxx_amd64.deb`
c) `$ sudo systemctl daemon-reload`
3) Activate license. Answer the prompts. Reboot to activate new license. Verify No. of sensors, PTZ cameras, Rules, SubVehicle.
a) From a new terminal on the host computer, run the commands
i) `$ cd /opt/quanergy/qortex-server`
ii) `$ ./Qortex-Server --license activate`
iii) `$ sudo reboot`

Client

1) Download the Qortex DTC installer package to the Ubuntu host computer /Downloads directory.
a) On the Quanergy Download Center URL, https://downloads.quanergy.com/#qortex, click to agree to licensing terms.
b) Click the Client: Ubuntu link and download the Qortex DTC Client Debian package, qortex-client_2.x.xxx_amd64.deb. Where x.xxx is the release number.
2) From a terminal on your host computer, run the command:
a) `cd ~/Downloads` (or to wherever you saved the package)
b) `$ sudo dpkg -i qortex-client_2.x.xxx_amd64.deb`

Windows

Server

1) Download the Qortex DTC Server installer package to the Windows 10/11 host computer /Downloads directory.
a) On the Quanergy Download Center URL, https://downloads.quanergy.com/#qortex, click to agree to licensing terms.
b) Click the Server: Windows link and download the Qortex DTC Server Windows package, qortex-server-2.x.xxx-win64.exe. Where x.xxx is the release number.
2) Locate the installer file you downloaded. Double-click on the file to begin the installation process and follow the on-screen instructions.
3) Activate license. Answer the prompts. Verify No. of sensors, PTZ cameras, Rules, SubVehicle.
a) Open a Command Prompt window, run the command
i) `"C:\Program Files\Qortex-Server\Qortex-Server.exe" --license activate`

Client

1) Download the Qortex DTC Client installer package to the Windows 10/11 host computer /Downloads directory.

a) On the Quanergy Download Center URL, https://downloads.quanergy.com/#qortex, click to agree to licensing terms.
b) Click the Client: Windows link and download the Qortex DTC Client Windows package, qortex-client-2.x.xxx-win64.exe. Where x.xxx is the release number.
c) Locate the installer file you downloaded. Double-click on the file to begin the installation process and follow the on-screen instructions.

Note: Microsoft Defender might prevent the Windows Installer(s) from running. Click on More Info, then Run anyway

Qortex DTC Usage

1) Start the Client
a) Windows: double-click the QORTEX DTC client icon.
b) Ubuntu: from a terminal, run the command: `/opt/quanergy/qortex-client/Qortex-Client`
2) Select a QORTEX DTC Server
a) In the client, click "No Server Selected" button > Add Server panel > Add New Server button.
b) Enter the Server details: Server Name (nickname), Server IP address (of Qortex DTC Server), then click OK.
3) Enter Configuration Mode
a) Open the Configuration panel. Click the Settings button and click CONFIRM.
4) Add a Sensor
a) Go to the Server tab > Single. (See Q-Track User Guide for Multiple sensors).
b) 2. Complete the form: Sensor IP Address, Sensor Name, Location Template.
c) Click OK.
5) Connect to the sensors
a) Click the Connect Button in the top left.

Powering Down

To safely shut down, terminate active programs, disconnect the sensor, wait two seconds, and reconnect if necessary.

Documents & Support

Download guides and datasheets from downloads.quanergy.com.
For support, contact **support@quanergy.com**.

For additional support or documentation, please contact Quanergy Systems, Inc.