Q-View Quick Start Card

Thank you for your interest in Quanergy's Q-View™ application. This card summarizes how to set up and use Q-View 1.8 on Linux® Ubuntu®-certified 20.04 (LTS Focal Fossa) operating system and Windows® 10 platforms.

Q-View is a user-friendly, software-based management and visualization toolkit for Quanergy's LiDAR sensors. This automated system unleashes the full functionality of Quanergy's artificial-intelligence-powered LiDAR-based sensing systems. Q-View provides robust data about a sensor network and its performance along with intuitive tools to calibrate and align the sensors and to visualize and record the data they collect.

Features

- **Informational Display.** An automatic sensor discovery engine driven by the multicast Domain Name System (mDNS) protocol discloses a wealth of specific data about the network, the sensors on it, and their performance. Manual search mode finds specific sensors by IP address.
- **Intuitive Operation.** Offers automatic and manual modes for exploiting the full functionality of sensor query and diagnosis, visualization, and calibration with consistent, intuitive controls.
- **Simple Calibration**. Multiple sensors acting in concert provide an enriched perspective of a shared area of interest after a calibration tool aligns sensors' views to enable Multi-LiDAR Fusion™.
- **Recording and Export.** Controls simultaneous recordings of data collected by one or more LiDAR sensors. The recorder saves point cloud output in the QLog format for export to PCD or LAS formats.
- **Object Detection.** Configures QORTEX Aware™ software on M1 Edge sensors. QORTEX Aware sends a notification when objects enter defined Evaluation Zones to enable object detection and collision avoidance applications.

Documents

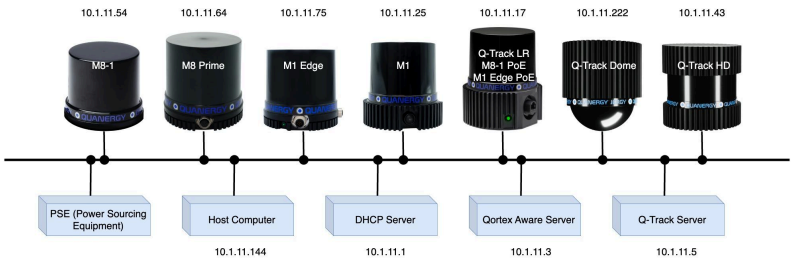
- *For Q-View User Guide* and *Q-View Quick Start Card*, go to http://downloads.quanergy.com/.
- Request sensor specific documents: *Q-Track Sensor User Guide* and *Quick Start Cards*, and Quanergy *Documents List* from support@quanergy.com.
- For licensing acknowledgments go to http://downloads.quanergy.com/License.txt.

Detailed instructions are in the downloadable *Q-View User Guide*. Below is a quick summary of the essentials.

Connect to Host Computer via Router

1. Connect a dynamically set sensor (not configured for a static IP address) to a router that is on the same network as the host computer.
2. Connect the sensor to power.

The DHCP server auto-assigns the sensor a dynamic IP address with the same network address as the computer, enabling communication.



Install, Start, and Quit Q-View on Ubuntu

Install Q-View on Ubuntu

1. Download the Q-View installer package to the Ubuntu host computer `/Downloads` directory.
   a. On the Quanergy Download Center URL, http://downloads.quanergy.com, click to agree to licensing terms.
   b. Click the **Linux** link. From the `qview_readme.txt`, locate the download page URL. Open a browser to the Linux download page, http://downloads.quanergy.com/qview/linux/ and select the Q View Debian package, `quanergy-qview_1.8.xxx_amd64.deb`. Where *xxx* is the release number.
2. Open a new terminal on the host computer. To remove old versions of Q-View, run the command:

```
$ sudo dpkg -r <package-name>
```

3. In the terminal window, run the installer from the download directory:

```
$ cd ~/Downloads                                    #Or to wherever you saved the package
$ sudo dpkg -i quanergy-qview_1.8.xxx_amd64.deb
```

- **Start the Q-View application**, run the command.

```
$ /opt/quanergy/Q-View/Q-View
```

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

Install, Start, and Quit Q-View on Windows

Install Q-View on Windows

1. Download the Q-View installer package to the Windows host computer `/Downloads` directory.
   a. On the Quanergy Download Center URL, http://downloads.quanergy.com, click to agree to licensing terms.
   b. Click the **Windows** link to download the installer, `Q-View-1.8.xxx-win64.exe`. Where *xxx* is the release number.
   2. Start the Q-View installer. Double-click the file, `Q-View-1.8.xxx-win64.exe` and follow the **Wizard** prompts.

When installation completes, the Q-View shortcut icon is added to the desktop.

- **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.

Using Q-View

1. Upon startup, Q-View scans the local network and displays sensors as tiles in the **Dashboard** tab.
2. Optionally, to give preference to IPv6 addresses, toggle IPv6 Address to **ON**.
3. After the search stops, click **Search** network again if you don't see all expected sensors or to refresh.
4. Click a sensor tile label (for example, Sensor 7); type a name such as `Entrance`.
5. Connect to **Online** (blue) sensors by clicking the **Add** button. **Connected** (green) tiles allow you to:

   - Click the **More** button to show the sensor's diagnostics panel. Click the panel **Close** button to dismiss.
   - Click the **Visualize** tab (**LIVE** mode), select one connected sensor's button, view its point cloud.
   - Click the **Record** tab:

     Record point cloud data: select from the listed sensors, assign a filepath to storage directory, adjust preferences, click **START** to begin recording, and click **STOP** to end recording.

     Export a recorded file: click the **EXPORT** button, identify filepath where stored, assign filepath to output directory, adjust preferences, click the **START** button, and wait for **Export** completed message.
   - Click the **Calibrate** tab (**LIVE** mode), select **First** then **Second** sensors, align them to visualize a single view.
   - Click the **QORTEX Aware** tab, select a supported sensor to configure the sensor **Evaluation Fields** and **Zones**.