



# Q-Track HD™ 3D LiDAR Sensor

## See Beyond with Quanergy 3D LiDAR Solutions

The new Q-Track-HD™ provides optimal 3D LiDAR detection, tracking and classification performance for challenging environments such as crowded airports, large malls and stores, industrial and manufacturing facilities, and education and corporate campuses. With a 360° horizontal field of view and a very wide 70° vertical field of view, a meshed network of Q-Track-HD sensors can accurately track over 1000 people simultaneously, even as they move around obstructions such as line queues, columns, shelves, desks, and more. As an end-to-end solution, Q-Track™ redefines smart spaces and physical security with a seamlessly integrated solution that combines Quanergy's 3D LiDAR sensors with advanced perception software. This solution provides users with hyper-accurate 3D intelligent proactive awareness for a variety of smart spaces and physical security environments.

- **3D Real-time Proactive Awareness:** Comprehensive 360° horizontal view and 70° vertical view
- **20x Higher Alarm Detection Accuracy:** 20x higher accuracy in detecting real alarms at less than half the price of existing technologies
- **Simultaneous Tracking of 1,000+ Objects:** Track 1,000+ unique objects simultaneously, ensuring comprehensive monitoring of your environment.
- **NDAA/GDPR:** Complies with the National Defense Authorization Act (NDAA) and does not capture PII
- **Continuous Object Tracking with Sensor Fusion:** Our sensor fusion technology enables continuous object tracking in virtually unlimited areas
- **Automated ID Handover:** Maintain object IDs by fusing multiple servers for Curb to Gate coverage
- **Speed, Direction, and Geolocation Detection:** Accurate insights enabling a prompt response to potential threats.
- **Seamless Integration with Existing Systems:** Large ecosystem of integrations with VMSes, cameras, access control solutions, PSIMs, and analytics solutions.

## SPECIFICATIONS

### Q-TRACK SOFTWARE

Application	Object detection, tracking, and classification for security applications and smart spaces
Operating System	Windows 10/11, Windows Server 2022 and Ubuntu 20.04
Object Information	Provides an object list (direction, position, speed, classification) in Protobuf, JSON, XML, NDJSON
Classification Types	People, Vehicles (Two Wheelers, Passenger and Commercial Vehicles), Generic
Range	80m (40m radius) at 10% reflectivity
Accuracy	98% (Detection/Counting); 95% (Tracking/Classification)
False Alarm Reduction	Reduce false alarms by 98%
Number of Simultaneous Objects	Uniquely track 1,000+ objects depending on server specs and sensor count
VMS Compatibility	Most major VMSs such as Genetec Security Center, Milestone XProtect®, Hanwha Wave, Network Optix, Mirasys, Flir Latitude, Salient, Digifort, Surveill and many more
Camera Compatibility	Direct PTZ Camera control (Slew to Cue) through ONVIF and native APIs (Axis, Bosch)

### Q-TRACK HD LiDAR SENSOR

Number of Laser Beams	32
Laser Class	Class 1 Laser Product (eye safe), 905nm
Frame Rate	5-20Hz
Field of View (FOV)	Horizontal: 360°, Vertical: 70°
Output Connection	PoE+
Bandwidth	17 Mbps
Environmental Protection	IP67
Temperature Rating	-20°C to +60°C (Operating), -20°C to +85°C (Storage)
Weight & Dimensions	1100g, ~ 100 mm * 115 mm

