



# M8™ & QORTEX DTC™ Solution

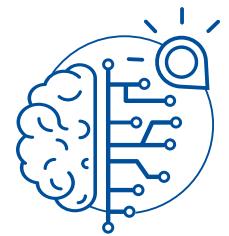
## 3D AI-Powered LiDAR Flow Management™ Platform

HIGH ACCURACY | REAL-TIME 3D | PRIVACY PROTECTION | COMPATIBILITY WITH LEADING VMS

The M8/QORTEX DTC Solution is an integrated hardware and software platform that combines Quanergy's M8 LiDAR sensor with QORTEX DTC (Detect, Track, Classify) perception software for reliable, real-time people and vehicle tracking in security, smart city, and smart space applications.

The solution uses artificial intelligence and 3D perception algorithms to scan the sensor's field of view, analyze point cloud data, and provide anonymized information on detected objects. This enables automated security that is both cost-effective and easy to manage. The solution allows users to:

- Identify and classify objects as people or vehicles
- Track individual people and vehicles and provide real-time, centimeter level accurate location information
- Configure rules to trigger point cloud recordings, network actions and/or automatically control PTZ camera movement to follow selected individuals



### High Accuracy and Low Rate of False Alarms

QORTEX DTC can provide greater than 95% detection accuracy and 24/7 reliability in all lighting and atmospheric conditions. The accuracy and reliability of QORTEX DTC significantly reduces false alarms, ultimately saving time and costs. Even camera-based security systems can greatly benefit from adding QORTEX DTC for enhanced sensing and perception, lowering the false alarm rate as much as 84%.

### Automated ID Handover™ and Efficient AI Processing

The solution's Automated ID Handover capability allows continuous tracking of up to 300 individuals or vehicles throughout the system's entire field of view. This allows for powerful system-wide data solutions such as curb-to-gate people tracking at airports, flow management and footfall analytics, and social distancing applications in public venues like stadiums. The latest QORTEX DTC software includes a 33% improvement in object processing compared to previous iterations of QORTEX DTC.

### Zero Personal Identifiable Information (PII) Risk

The patent pending QORTEX perception software does not rely on facial recognition technology and does not require capturing or storing any personally identifiable information. As a result, the solution protects individual privacy and poses zero PII risk.

### Easy to Manage, Automated Solution

The solution is easy to install, configure, and manage. For example, the solution features autocalibration of LiDAR and PTZ cameras to simplify installation and configuration. A rules engine automates point cloud recordings, PTZ control, and network actions based on real-time events. In addition, QORTEX DTC is integrated with leading VMS platforms such as Genetec Security Center™ and Milestone XProtect to provide a unified security solution and PTZ camera integration.

### Product Acceleration with Fast Track Software Bundle

With the QORTEX DTC Fast Track Software bundle, customers can reduce their product time-to-market by focusing their efforts on value-added application-level development. The Fast Track Software bundle includes source code, tools, and business logic to help customers and partners go to market faster. The bundle also includes features like Google Map visualization, sensor coverage, geo-location, port monitoring, and alerts.

## Applications



- Perimeter security
- Critical infrastructure



- Traffic intersections & pedestrian crosswalks



- Retail
- Commercial buildings
- Stadiums & public venues
- Airport



- Social distancing

**SPECIFICATIONS**
**QORTEX DTC CLIENT**

Application	Visualize and configure QORTEX DTC Server (not required during normal operation)
Operating System	Windows 10 and Ubuntu 18.04
Minimum System Requirements	Intel Core i3, 4 GB RAM, OpenGL-compliant graphics, Gigabit Ethernet
Display Resolution Support	1024x768, 1280x800, 1280x1024, 1366x864, 1440x900, 1600x900, 1920x1080, 2048x1536, 2560x1440, 3840x2160 and 4096x2160

**SPECIFICATIONS**
**QORTEX DTC SERVER**

Application	Object detection, tracking and classification for security, smart buildings, smart spaces, and social distancing
Operating System	Ubuntu 18.04
Object Information	Provides an object list with 3D direction and position, speed and classification in Protobuf, JSON or XML format
Classification Types	Human, Vehicle, Unknown
Continuous Tracking Range	80m (40m radius range)
Maximum Number of Simultaneous Objects	Up to 300 objects depending on hardware processing platform: QPU-L7: 200 objects, QSPU: 300 objects
Minimum System Requirements	Intel Core i3, 4 GB RAM, Gigabit Ethernet (2 virtual cores + 1 virtual core per sensor) 100 MB storage memory (no recording)
Recording Storage Requirement	150 MB/sensor/min (single return mode)
VMS Compatibility	Genetec GSC (RSA, PFA & TTE), Milestone Xprotect
Additional Features	Rules Engine, PTZ Camera control (ONVIF Profile S)**

**SPECIFICATIONS**
**M8**
**M8-PoE**

Laser Class	Class I (Eye Safe IEC 60825-1)	
Wavelength	905nm	
Field of View (FOV)	Horizontal: 360°, Vertical: 20° (+3°/-17°)	
Output Connection	M19 connector, 100/1000 Mbps Ethernet	RJ-45, 802.3at (PoE+)
Nominal Power	16W	18W
Input Voltage	24VDC +/-1.2V	42.5-57VDC
Operating Temperature	-20°C to +60°C (-4°F to +140°F)	
Storage Temperature	-40°C to +105°C (-40°F to +221°F)	
Nominal Weight	1000g	1360g
Dimensions	103mm diameter x 87mm height	
Shock and Vibration	ETSI EN 300 019-2-5, IEC Class 5M3	
Environmental Protection	IP69K	
Certifications and Compliance	FDA, FCC, CE, RoHS, WEEE, ISO 9001:2015, EN-61326, IEC-60079-15, ASTM G154	
Warranty	2 years	

\*Specifications are subject to change without notice

\*\*Contact Quanergy Sales for the supported camera list