



Q-Track™ 3D Intelligence for Airport Flow, Security, and Operations

Flow Intelligence. Airport Security.

Airports move on flow. Q-Track™ uses privacy-safe 3D LiDAR to give operations, security, and customer experience teams the same real-time picture, from curb to gate. It measures wait times, predicts surges, and highlights bottlenecks without cameras, faces, Wi-Fi, or PII. It also hardens security with invisible 3D zones that trigger the right action the instant a boundary is crossed. Q-Track can integrate with your VMS, ACS, Digital Twin, and BI tools so staffing, signage, cleaning, and dispatch adjust automatically cutting queues, improving on-time performance, and elevating the passenger experience.



Applications

Passenger Flow & Queue Intelligence

- Live wait times and predicted surges for ticketing, security, and boarding; alerts drive staffing moves before queues form.
- Anonymous, continuous paths map dwell and journey times from curb to gate no faces, phones, or PII.

Checkpoint & Screening Ops

- Detect stalled or imbalanced lanes in seconds, route passengers to open lanes via signage, apps, or PA systems.
- Measure throughput by hour and shift; test lane configs and staffing to increase passengers-per-lane.

Terminal & Gate Operations

- Monitor congestion in concourses, restrooms, retail, and lounges; trigger cleaning, restock, and wayfinding in real time.
- Gate-readiness insight shows boarding progress, late-stage crowding, and special-assistance needs to reduce turn times.

Perimeter & Airfield Security

- Create invisible 3D zones along fences, tug roads, aprons, and sterile areas; auto-trigger VMS/ACS actions on breach.
- Monitor mantraps and exit lanes; detect tailgating (multi-person entry) and exit-lane breach (wrong-way from sterile to public); auto-trigger in VMS/ACS actions.
- Outperforms existing security sensors; fewer false alarms than video motion with direct PTZ handoff.

Emergency Response & Resilience

- Live occupancy views show where people are during incidents; speed evacuations and reunification without Wi-Fi or badges.
- Improve drills: see choke points and timing gaps; refine procedures and staffing.



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