

ORION LiDARsystem

Next-Gen Defense
Against UAV Threats

ORION LiDAR

Transforming Defense Capabilities
with Precision Detection

The **ORION LiDAR** System revolutionizes aerial surveillance with **heterodyne coherent Doppler technology**, enabling precise detection and tracking of Class 1 micro/mini-UAVs.

Overcoming traditional radar limitations, **ORION** delivers unmatched accuracy and seamless integration into counter-drone systems for defense and security missions.



Raymetrics S.A., a global **LiDAR** innovator and **NATO DIANA Challenge** awarded in "Sense & Surveillance," leverages this breakthrough to advance NATO-aligned defense solutions against asymmetric threats.



Why ORION Outperforms Radar

- **Superior Detection:** Identifies low-RCS, slow-moving, and low-altitude UAVs missed by radar.
- **Reduced False Alarms:** Advanced accuracy minimizes reliance on secondary sensors.
- **Autonomous Operation:** 24/7 functionality with minimal intervention.

Technical Excellence

- **Core Tech:** Coherent detection for precise velocity/signal analysis.
- **Eye-Safe & Reliable:** 1.55µm fiber-based LiDAR ensures safety and performance.
- **Integration:** Enhances layered defense within existing c-UAV systems.

Applications

Defense & Security

- Threat detection/tracking, battlefield awareness, border/naval security.
- Integration with jamming/interception systems.

Civil & Emergency

- Disaster response, critical infrastructure protection, airspace management.
- Law enforcement aerial threat monitoring.

Operational Advantages



Long-Range Precision:

Detect small UAVs at extended distances.



Real-Time Insights:

Instant data processing for rapid decisions.



Proactive Defense:

Continuous operation for persistent threat response.

Redefining Aerial Surveillance

ORION LiDAR merges cutting-edge LiDAR with defense-grade durability to counter evolving UAV risks.

Raymetrics pioneering NATO-aligned innovation for mission-critical reliability.



ORION LiDAR

Experience the **FUTURE**
of Defense Technology
with **ORION LiDAR**

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for mission-critical reliability.

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