



Aeva Introduces Atlas Orion 4D LiDAR to Power the Future of Smart Infrastructure, Traffic Management, and Security

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Integrated Data and Power-over-Ethernet Interface Simplifies Deployment; Certified to NEMA-TS2 Traffic Control Systems Standards for Reliable Operation in Harsh Outdoor Environments

First Atlas Orion Customer Deployments in Traffic Management and Smart Infrastructure Have Started including D2 Traffic Technologies and Sotereon.ai

MOUNTAIN VIEW, Calif.--(BUSINESS WIRE)--Aug. 12, 2025-- [Aeva](#)[®] (Nasdaq: AEVA), a leader in next-generation sensing and perception systems, today introduced [Aeva Atlas™ Orion](#) a high-performance 4D LiDAR sensor built to transform smart infrastructure and security. Engineered to meet rigorous NEMA-TS2 traffic signal control standards, Atlas Orion delivers long-range perception and durability for demanding outdoor environments. Its single-box design with integrated power and data over ethernet (PoE++) makes deployment fast and cost-efficient, while Aeva's breakthrough FMCW 4D LiDAR technology provides the accuracy and intelligence needed to power data-driven smart cities and secure facilities.

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Aeva's Atlas Orion 4D LiDAR sensor powers the future of smart infrastructure, traffic management, and security.

applications. Featuring Aeva's Ultra Resolution™ technology, it delivers the accuracy and clarity required to optimize infrastructure operations and improve safety. Atlas Orion simultaneously measures velocity and position, enabling precise tracking in dynamic environments, with a detection range of up to 500 meters for vehicles and up to 200 meters for vulnerable road users. With a 120-degree field of view and ultra-fine angular resolution of up to 0.05° x 0.05°, Atlas Orion can achieve comprehensive intersection coverage using just two sensors—driving operational efficiency and scalability in traffic management deployments.

"Atlas Orion sets a new standard for smart infrastructure," said Mina Rezk, Co-Founder and CTO of Aeva. "This product is part of our expanding vision to create smarter, safer, and more efficient cities. With its high performance, dynamic object detection and tracking, and ease of installation, Atlas Orion provides immediate value for cities, large facilities like airports, and security teams seeking to leverage data for better decision-making."

Key Advantages of Atlas Orion:

- **Ultra-Long Range:** Simultaneous range and velocity measurements provide high confidence detection and tracking of moving objects including vehicles at up to 500 meters and vulnerable road users at up to 200 meters.
- **Certified for Reliability:** Meets NEMA-TS2 traffic signal control standards for durability in demanding environments.
- **Low-Light Performance:** Operates reliably in nighttime and low-light conditions, outperforming camera-only systems.
- **Immune to Glare and Interference:** Unaffected by sunlight glare and immune to blooming or ghosting from reflective surfaces like road reflectors and street signs.
- **Power Over Ethernet (PoE++):** Easy installation with a single gigabit ethernet cable for both data and power, reducing infrastructure complexity and cost.
- **Privacy-First Design:** Collects situational data without capturing personally identifiable information, addressing critical privacy concerns in public and private spaces.

Atlas Orion is already shipping to leading smart infrastructure companies including Sotereon.ai and D2 Traffic Technologies, and is now available to infrastructure operators, security system integrators, and crowd management customers worldwide. To learn more, visit: www.aeva.com/atlas-orion

About Aeva Technologies, Inc. (Nasdaq: AEVA)

Aeva's mission is to bring the next wave of perception to a broad range of applications from automated driving, manufacturing automation and smart infrastructure, to robotics and consumer devices. Aeva is accelerating autonomy with its groundbreaking perception platform that integrates lidar-on-chip technology, system-on-chip processing, and perception algorithms onto silicon leveraging silicon photonics. Aeva 4D LiDAR sensors uniquely detect velocity and position simultaneously, allowing automated devices like vehicles and robots to make more intelligent and safe decisions. For more information, visit www.aeva.com, or connect with us on [X](#) or [LinkedIn](#).

Atlas Orion is engineered with high-resolution detection and dynamic object tracking to address the challenges of transportation safety, security, and crowd monitoring

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Forward looking statements

This press release contains certain forward-looking statements within the meaning of the federal securities laws. Forward-looking statements generally are identified by the words “believe,” “project,” “expect,” “anticipate,” “estimate,” “intend,” “strategy,” “future,” “opportunity,” “plan,” “may,” “should,” “will,” “would,” “will be,” “will continue,” “will likely result,” and similar expressions. These forward-looking statements include, but are not limited to expectations about our product features, performance and our relationships with customers. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to risks and uncertainties. Many factors could cause actual future events to differ materially from the forward-looking statements in this press release, including, but not limited to: (i) the fact that Aeva is an early stage company with a history of operating losses and may never achieve profitability, (ii) Aeva’s limited operating history, (iii) the ability to implement business plans, forecasts, and other expectations and to identify and realize additional opportunities, (iv) the ability for Aeva to have its products selected for inclusion in OEM products for commercial scale production, (v) the commercial success of any OEM products in which Aeva’s products might be included, (vi) unforeseen manufacturing issues or defects, (vii) Aeva’s ability to scale production if any products achieve commercial success and (viii) other material risks and other important factors that could affect our financial results. Please refer to our filings with the SEC, including our most recent Form 10-Q and Form 10-K. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and Aeva assumes no obligation and does not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. Aeva does not give any assurance that it will achieve its expectations.

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