

Cepton™'s Vista Lidar Allows High-resolution, Long-range Autonomous Driving



[Cepton Technologies](#), a provider of 3D LiDAR solutions for automotive, industrial, and mapping applications, has announced the addition of two new LiDAR products, Vista-M and Vista-X, to its product portfolio.

The Vista series LiDAR solutions are built with Cepton's patented Micro-Motion Technology (MMT) and run on the NVIDIA DRIVE in-vehicle AI computing platform - providing high-resolution and long-range imaging to enable all levels of autonomous applications.

"Cepton is ushering in the next generation of autonomous driving with long-range, high-resolution 3D perception at an affordable price," said Jun Pei, CEO and co-founder of

Cepton Technologies. "Our Vista-X and Vista-M solutions enable seamless vehicle integration and provide designers with the freedom to create elegant vehicle designs. We are ready to mass produce the Vista Series LiDAR with our tier one suppliers and manufacturing partners for the immediate deployment of autonomous vehicles."

The Vista-M LiDAR packs a 120-degree field of view (FOV) with a 150-metre range into a sensor. This compact design enables LiDAR integration with a vehicle's headlights, tail lights and side view mirrors, giving designers more freedom to bring intelligence and autonomy into vehicle designs. Currently, Cepton is providing this miniaturised solution to its automotive partners for different integration approaches.

The Vista-X LiDAR supports an expanded 200-metre range capability at a 10% reflectivity target to 120-degree FOV. This wide FOV enables object detection, tracking and localisation in a much wider area. The uniform 0.2-degree spatial resolution across the entire FOV eliminates the complexity and safety risk in run-time FOV configurations enabling the design flexibility to integrate Vista-X into the front, back or inside of the vehicle.

"High performance and cost efficient LiDARs are important developments that will help bring self-driving vehicles to market," said Glenn Schuster, senior director, technical marketing, NVIDIA. "By leveraging the NVIDIA DRIVE platform's high-performance computational capabilities for processing, vehicles can get an accurate representation of their surrounding environment to autonomously navigate."

Continued market forecast from leading LiDAR analyst firm, Yole Développement, indicates that 2019 and beyond are prime for the autonomous car market – [with an expected market value of US\\$28B by 2032](#).