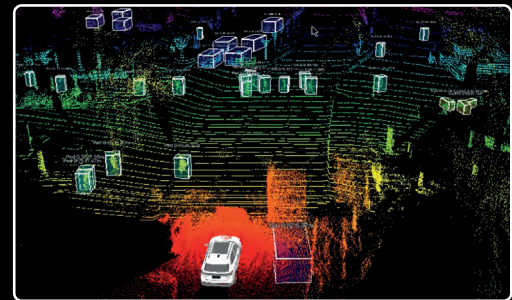




HALO

Long Range. Ultra Compact. High Performance.



HALO - engineered to deliver breakthrough performance, streamlined integration, and scalable production suitable for mainstream commercial vehicles and industrial applications. Designed from the chip level up, MicroVision®'s HALO combines ultra-thin form factor with industry-leading sensing capabilities to enhance safety and advance assisted-driving features. Its compact architecture enables seamless integration while maintaining high precision in a wide range of environmental conditions.

Engineered for Long Range. Designed for High Performance.



Long-Range, High-Resolution Sensing

Superior Object Detection Performance and High Range Capability.



Ultra-compact housing

Engineered for precision and reliability, and designed for seamless integration.



Low latency

Enabling autonomous systems to make quicker decisions for safer outcomes.



Full Lidar Solution

Complements our short-range sensor to provide OEMs with a complete, integrated lidar coverage suite.

Product proof points

312 m

Long Range Detection

120° x 39°

Field of View

1535 nm

Laser Technology

~20 W

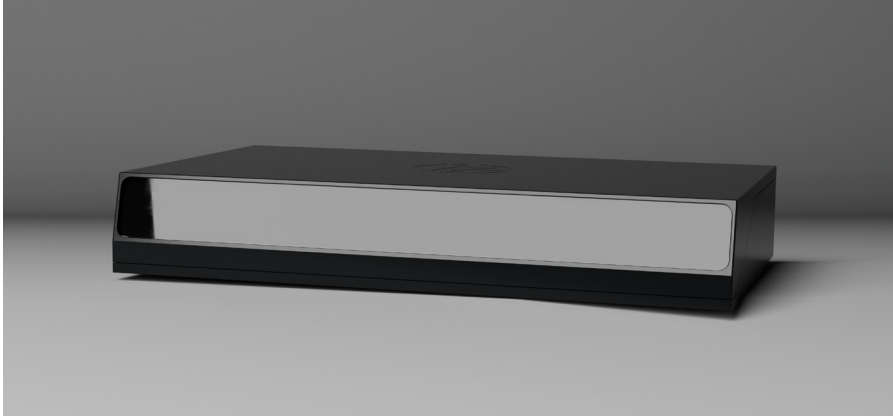
Low Power Consumption

30 mm

Height: Ultra-Thin Design



Long-Range, High-Resolution Sensing.



- ▶ Ultra-thin design and lightweight construction for flexible and seamless integration.
- ▶ High resolution at range: Detecting and identifying small objects at highway speeds.
- ▶ Ultra-compact housing: seamless integration into design-critical components.
- ▶ Low Power Consumption (~20 W)
- ▶ Developed to automotive-grade standards
- ▶ Production-Ready Architecture: optimized for scalable, high-volume manufacturing.

Highway ADAS / L3 Autonomy

- ▶ Highway Pilot / Eyes-Off Driving
- ▶ Automatic Emergency Braking at Highway Speed
- ▶ Road Surface Detection

Autonomous Driving

- ▶ Environmental mapping
- ▶ Localization
- ▶ Obstacle detection & object classification
- ▶ Low-Speed Maneuvering

Commercial Applications

- ▶ Last-Mile Delivery
- ▶ Autonomous Yard Trucks & Logistic Hubs
- ▶ Depot Automation
- ▶ Bus and Shuttle Automation

Specifications & System Highlights

Technology / Laser / Optical	Specifications
Field of view (h x v)*	120° x 39° (full radiometry +10°/-16°)*
Maximum Instrumented Range	312 m
Radiometry (10 % Lambertian ref, 90 % PoD, 0.1 % FAR)	200 m
Minimum Instrumented Range	0.5 m (existence indicator < 0.5 m)
Range Precision (1σ, 50 m, 10 %R)	< 3 cm
Frame Rate	1 Hz – 30 Hz **
Laser Product Class	Class 1 per IEC / EN 60825-1: 2014
Dimensions (w, d, h) without mounting brackets	180 x 110 x 30 mm
Weight	750 g
Ingress Protection	IP67 + IP69K

* FoV, resolution, and frame rate are software defined within and between frames.

** Automotive and non-automotive Ethernet hardware variants.

High-Resolution Sensing for Highway ADAS and Autonomous Driving	Long-Range solution as part of ADAS and autonomous driving solutions	120° perception Precise perception across the entire width
Open Software Framework for customer applications	Compact and Light-weight for seamless vehicle integration	Low Power Consumption ~20 W