



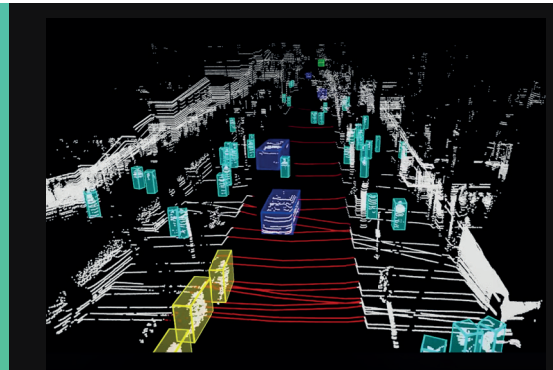
IRIS

Long-Range, High Resolution.

MicroVision's IRIS is a high performance, automotive grade long range LiDAR sensor engineered to enable advanced safety and highway speed autonomy. Built from the chip level up, IRIS combines a 1550 nm laser architecture and ultra sensitive receiver technology to deliver long distance, high confidence sensing in a compact form factor designed for series production and seamless vehicle integration.

Key Features

- ▶ Ultra-sensitive InGaAs receiver & custom ASIC for reliable detection of small, dark, and low-reflectance objects at long distances.
- ▶ Software-configurable field of view enables adapting to different vehicle platforms and use cases, from advanced driver assistance systems to Level 3 autonomy
- ▶ Two-axis scanning with wide field of view; 120° horizontal and software-configurable vertical FoV (up to 26°)
- ▶ Engineered for automotive-grade durability and mission profile optimized reliability as well as high-volume manufacturability



Performance Features	Specifications
Maximum Instrumented Range	280 m
Minimum Instrumented Range	2 m
Radiometry (10% Lambertian ref, >90% PoD, FAR 0.1%)	200 m
Field of View (H x V)	120° x 26°
Beam Divergence	0.06° (symmetric)
Typical Horizontal Point Spacing	0.12°
Typical Vertical Point Spacing	0.05° min, SW configurable
Range Precision (1σ, 50 m, 10% R)	4 cm
Number of Returns	Up to 5 (+1 blockage detection)
Frame Rate	1 Hz - 30 Hz, SW configurable



Technical Data

Laser	Specifications
Laser Product Class	Class 1 per IEC / EN 60825-1: 2014
Laser Wavelength	1550 nm

Lidar Output	Specifications
Communications Network	1000BASE-T1 (Automotive Ethernet)
Data Protocol	User Datagram Protocol (UDP)
Control Protocol	SOME / IP
Diagnostic Protocol	DoIP
Synchronization	gPTP (IEEE 802.1AS)
Data Rate	125-330Mbps

Control and Data Interface	Specifications
Connector	Rosenberger E6S14E-1CAZ5-Z
Mating Connector	Rosenberger E6K14A-1CAZ5-y

Mechanical/Electrical	Specifications
Power Consumption	~25 W Nominal
Connector	JAE MX80B03PZ1A
Mating Connector	JAE MX80A03SZ1A
Operating Voltage	9-16 V DC (nominally 12 V DC)
Dimensions (w, d, h) without mounting brackets	270 mm x 106 mm x 54 mm
Weight with / without bench-top rear TCU	3.1 kg / 2.15 kg

Operational	Specifications
Operating Temperature (nominal performance)	-40° to 85° C (case reading)
Storage Temperature	-40° to 105° C
Ingress Protection	IP67 listed
Shock Vibration	IEC 60068-2-27 ISO 16750-3

Technology & Innovation



Long Range



Compact Design



High resolution



Robust Sensor



Low Latency

