



MOVIA™ S

180° lidar solution for the most demanding near-field applications.

MOVIA™ S – MicroVision's next-generation solid-state lidar. Smaller, higher resolution, and significantly more cost effective than traditional solutions, MOVIA™ S delivers high-performance perception in an ultra-compact form. Designed for maximum flexibility and effortless integration into customer applications, powered by the Open Software Framework (OSF).

Ultra-compact. Highly Cost-effective. High Resolution.



180° Field of View

Ultra-wide field of view for complete environmental awareness.



Highly cost-effective

Lower total system costs thanks to tailored application design and software-defined hardware.



Ultra-Compact housing

Minimized footprint that expands placement options and protects OEM design intent.



Open Software Framework

Designed for maximum flexibility and for customer applications deployable on the sensor.

Product proof points

180° x 132°

Field of View

**Integrated
IMU**

Pure solid-state

No moving parts

<400 g

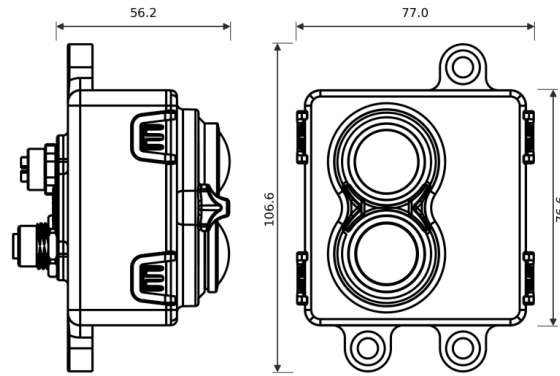
Lightweight

<9 W

Typical power
consumption



180° performance. For all near-range applications.



- ▶ Highly cost-effective, scalable near-range solution
- ▶ Ideal for near-range applications like industrial ADAS and low-speed autonomy
- ▶ Ultra-compact housing for seamless integration
- ▶ Pure solid-state: no moving parts
- ▶ Low power consumption
- ▶ Onboard processing capability and optional perception software
- ▶ Developed to automotive-grade standards

Industrial ADAS

- ▶ Blind Spot Detection
- ▶ Collision Avoidance
- ▶ Object Recognition

Autonomous Driving

- ▶ Environmental mapping
- ▶ Localization
- ▶ Obstacle detection & object classification
- ▶ SLAM

Emerging Applications

- ▶ Ground detection
- ▶ Zone occupancy
- ▶ Flexible Security Alert capabilities

Specifications & System Highlights

Technology / Laser / Optical	MOVIA™ S
Field of view (h x v)*	180° x 132°
Angular resolution (h x v)	Horizontal: ≤ 0.86° · Vertical: ≤ 0.80°
Range (10 % Lambertian reflectivity)	15.1 m @ 100 klx sunlight, >90 % detection probability (TPP), FPpF < 1 % 19.8 m @ 100 klx sunlight, 50 % detection probability (TPP)
Frame rate	10 Hz
Dimensions	77 × 76.6 × 56.2 mm
Weight	< 400 g
Power Consumption	< 9 W
Ingress Protection	IP6K9K

Integrated IMU

Onboard perception and processing

Near-field solution

as part of Industrial ADAS and autonomous driving solutions

180° perception

Precise perception across the entire width

Open Software Framework

for customer applications

Small and Light-weight

for seamless vehicle integration

Low Power Consumption

Typical ≤ 9- 11 W