MicroVision

MicroVision's MEMS Based Consumer LiDAR engine delivers low latency, high fidelity spatial awareness to AI-embedded hardware and applications. This solution will enable new product offerings in indoor home automation, sensing and navigation by providing instantaneous depth data and thereby the ability to build contextual maps of spaces and acquire with ease the localization information of tracked objects.

By packaging this solution with machine learning at the edge, actionable data is provided directly to the application eliminating the need to send raw sensor data to the cloud for processing. This results in reduced system latency while maintaining user privacy.

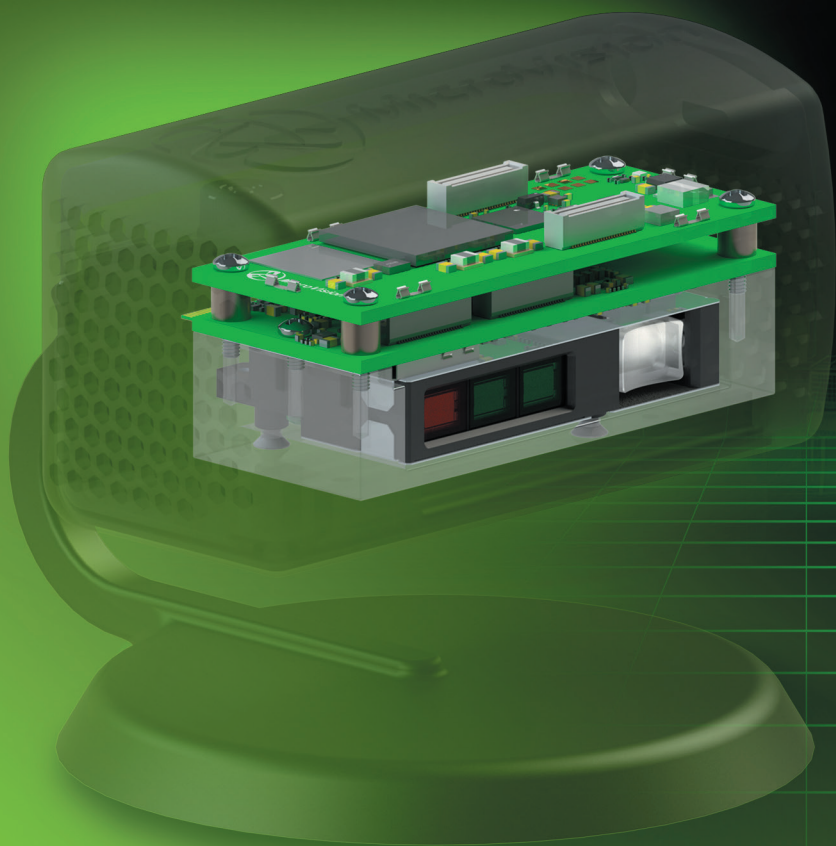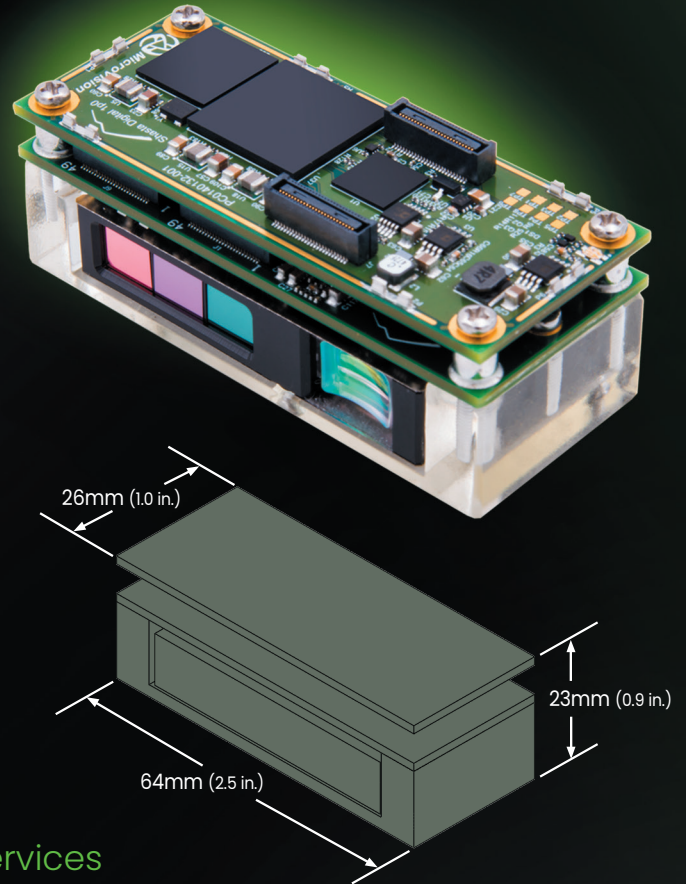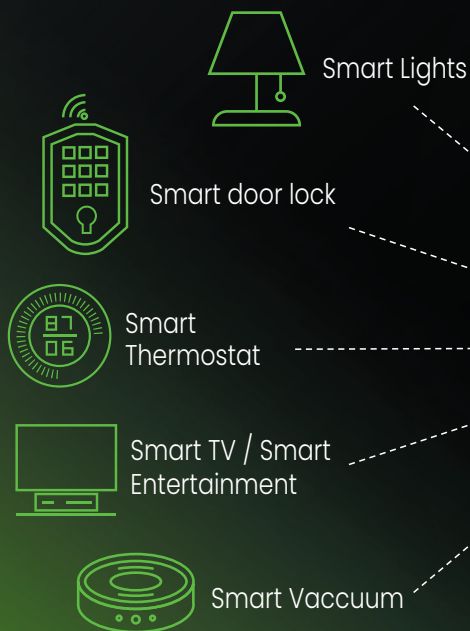|		
15.5 Mpts/sec	Depth data throughput (up to 20 Mpts/sec optional)
10m	Range (1 Klux ambient)
0.1° x 0.1°	Native angular resolution (H x V)
Class 1	Eye safe laser classification
ML	'Machine learning at the Edge' capable
16.7 msec	Frame latency (default)
13 cc	Compact size (optical module)

{ID, CLASS, LOCATION}

PRODUCT BRIEF

SPECIFICATIONS[1]

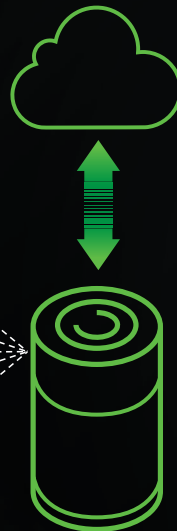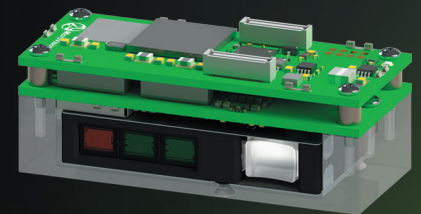|	
Depth Data Throughput (typ.)	15.5 M pts/sec
Range (typ. @ 1 klux ambient)	10 m
Native Angular Resolution (H x V)	0.1° x 0.1°
Field of View (H x V)	64° x 36°
Diagonal Field of View	73°
Frame Acquisition Latency (default)	16.7 msec
Depth Accuracy (typ.)	≤ 1% of Range
Spatial Point Position Stability	≤ 0.01°
Mechanical Dimensions (nom.)	64 mm x 26 mm x 23 mm
Data and Control Interface	MIPI-CSI
Power	5V DC
Laser Safety Classification	Class 1, IEC 60825-1:2014
Model Number	PSE-0400li3-101

Explorer Edition

26mm (1.0 in.)

23mm (0.9 in.)

64mm (2.5 in.)

Reference Application

Smart Lights

Smart door lock

Smart Thermostat

Smart TV / Smart Entertainment

Smart Vaccuum

Cloud Services

Smart Home Hub / Assistant

MicroVision's MEMS Based 3D LiDAR Engine

- Primary Hub Sensor
- Smart Home Security

REFERENCE APPLICATION DIAGRAM

MicroVision