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)
PRODUCT BRIEF

SPECIFICATIONS

- 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

- Primary Hub Sensor
- Smart Home Security

Reference Application

- Smart Lights
- Smart door lock
- Smart Thermostat
- Smart TV / Smart Entertainment
- Smart Vacuum

Cloud Services

MicroVision’s MEMS Based 3D LiDAR Engine

- Primary Hub Sensor
- Smart Home Security

REFERENCE APPLICATION DIAGRAM

1Specifications subject to change without notice; Sold subject to MicroVision Terms of Sale.