



**SENSE**

100% Solid-State

No Vertical Gaps

Up to 65 m Range

3D Global Shutter

### High-Precision Mode

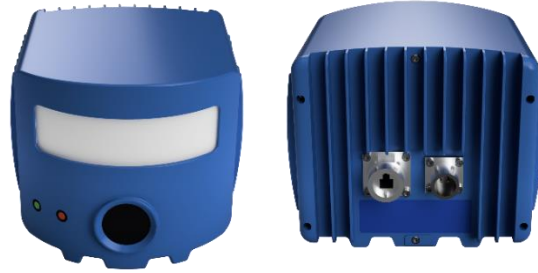
- Robotic Workcells
- Conveyor Systems
- Inventory Scanning
- Part Handling / Polishing
- Product Inspection
- Bin Picking

### Warehouse Mode

- AGVs
- Industrial Vehicles
- Automated Forklifts
- Heavy Equipment
- Security / Monitoring
- Pallet Detection
- Area Surveying

# Sense One

Purpose-built flash LiDAR for industrial deployments



Available in 3 hardware configurations to optimize range and FOV  
(Frame rate configurable in software)

Focus	Balance	Wide
80°H x 30°V FoV	80°H x 60°V FoV	95°H x 75°V FoV
65m range	30m range	20m range
0.27°H x 0.27°V resolution	0.27°H x 0.27°V resolution	0.27°H x 0.27°V resolution
500,000 pts/sec (10 Hz)	700,000 pts/sec (10 Hz)	950,000 pts/sec (10 Hz)
250,000 pts/sec (5 Hz)	350,000 pts/sec (5 Hz)	475,000 pts/sec (5 Hz)
100,000 pts/sec (2 Hz)	140,000 pts/sec (2 Hz)	190,000 pts/sec (2 Hz)

<b>Laser Safety</b>	Class 1 eye-safe per IEC 60825-1
<b>Wavelength</b>	Sense Illuminator - 940 nm VCSEL Array
<b>Range Accuracy</b>	3.5 cm (Typical) <sup>1</sup> with 10cm precision (max range)
<b>Output</b>	Point Cloud (X, Y, Z) Calibrated Reflectivity, Intensity, 2D Depth Map
<b>Interface</b>	Gigabit Ethernet (TCP/IP)
<b>Synchronization</b>	PTP (IEEE 1588)
<b>Mounting</b>	1/4-20" Threaded (Bottom)
<b>Dimensions</b>	140 mm (H) x 184 mm (W) x 187 mm (D)
<b>Operating Temp.</b>	-10°C to +50°C
<b>Storage Temp.</b>	-40°C to +80°C
<b>Weight</b>	3.4kg
<b>Ingress Protection</b>	IP67
<b>Vibration</b>	2.77g (rms), 10 - 1000 Hz, 3 axes w/ 8 hr duration ea. (IEC 60068-2-64, random)
<b>Shock</b>	500 m/s <sup>2</sup> Amplitude, 6 ms Duration, IEC 60068-2-27
<b>Connectors</b>	Data - Custom RJ4 (sealed & ruggedized) Power - Amphenol Lite M3 2-pin (sealed & ruggedized)
<b>Voltage &amp; Power</b>	12V to 24V DC 17 W (nominal consumption) <sup>2</sup>
<b>Electrical</b>	IEC 61010-2-201
<b>EMI</b>	IEC 61000-6-4 Radiation Interference (pending Q1 2021) IEC 61000-6-2 Noise Immunity (pending Q1 2021)
<b>Certifications</b>	FCC RoHS CE (pending Q1 2021)

<sup>1</sup> Typical accuracy refers to ambient wall test performance across pixel array and may vary with range, operating temperature, and target reflectivity

<sup>2</sup> Operating power may be influenced by factors including desired range and mode of operation