

Falcon is an ultra-long-range automotive-grade LiDAR that is in mass production today. Using 1550nm laser technology, Falcon can detect objects as far as 500 meters, and dark objects with 10% reflectance up to 250 meters. A configurable ROI (Region-of-Interest) feature allows you to easily and dynamically focus on key areas of interest.



Customer Benefits

- 1550nm laser technology enables ultra-long-distance detection
- Real-time, adjustable Region of Interest
- Highly configurable features to meet your specific needs
- Exceptional thermal performance
- In mass production today

250m @ 10%

Range

500m*

Max Range

10 FPS

Frame Rate

SW Configurable

120° x 25°

Field Of View

1500

Scan Lines / sec

 $0.08^{\circ} \times 0.09^{\circ}$

ROI Resolution

0.05° x 0.05° min

Inno?usion

Sensor Specifications

Detection Range	250m
Detection Range (max*)	500m*
Distance Precision	+/- 2cm@1sigma
Configurable Frame Rate	10 – xx FPS
Field of View (H*V)	120° x 24.5°
FOV of ROI (configurable)	40° x 4.8°
ROI Resolution (standard, configurable)	0.09°x0.08°
ROI Resolution (minimum)	0.05°x0.05°

Outputs

Data Transfer	1000 Base-T1	
Automotive Network	CAN	
Data Output	Pointcloud (X,Y,Z), Intensity or Reflectance	
Data Transfer	NTP , PTP , GPTP	
Time Synchronization	10µsec resolution for each data point	

164.0	Electrical		Laser	
	Operating Voltage	9-34V DC	1550nm	
	Power Consumption	29W, nominal	Class 1 (IEC-60825)	
	Physical Dimensions (H x W x D)		60 x 228 x150 mm	
N	Operating Temperature		-40° to 85° C	
(Enclosure Rating		Case: IP67, Front Panel: IP69K	
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