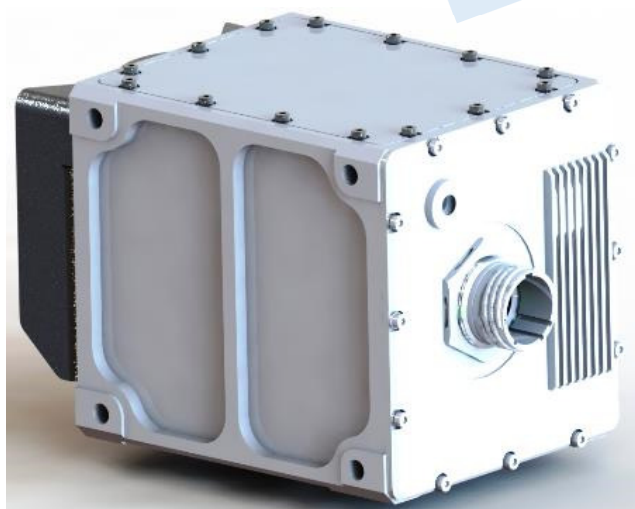


## Eyesafe LADAR ARLR-SWIR-HR

Long  
Range



Eyesafe  
SWIR



Ultra  
Compact

- \* 200m Eyesafe SWIR Laser LADAR
- \* High resolution, High scan density
- \* Manufactured for outdoor use

Ranging Rate  
~0.5 MHz

### FEATURES

Eysafe operational wavelength  
Fiber laser transmitter  
Low weight • Compact  
Affordable cost • Cost effective  
Low Maintenance • Passive cooled  
Sealed IP67  
Operating Temperatures -12°C to +55°C

### APPLICATIONS

Autonomous vehicle Navigation  
Traffic Safety  
Robotic  
3D objects detection and recognition  
3D Mapping  
3D Infrared imaging  
3D live video



EYESAFE LADAR MAIN PARAMETERS, MODEL: ARLR-SWIR-HR	
Amount of Channels	1
Wavelength, nm	1560
Field of regard (FOR), deg	45
Scan pitch, mrad	1.66@2fps, 2.6@5fps, 3.7@10fps
Scan Resolution, mrad	1
Beam Divergence, mrad	1
Repetition rate, pps	450,000 Programmable
Frame rate, fps (Hz)	10 (2 - 20)
Amount of pixels in a frame	44,500 (222500 - 22250)
Fill factor	0.072
Scan density, 1/mrad^2	0.072
Range, m	200
Range accuracy, m	0.02
Optics Clear Aperture Diameter, mm	40
Peak output power, W	100
Boresight to mechanical interface, mrad	1
Clear Aperture diameter of laser output beam, mm	10
Eye safety class (EN-60825, IEC60825-1)	1M, Eye safe at all ranges for the unaided eye
Operation Voltage MIL 1275, EMI 461F	DC 24 Volts
Power consumption, W	<50
Communication, Controls, Interfaces, Protocols	RS422, Discretes, Lase Enable, System BIT, 100 Mbps Ethernet Laser echo waveform – optional
Operating Temperature Range, °C	-12 to +55
Storage Temperature Range, °C	-40 to +71
Lifetime, Operational, hours	>10000
Calculated MTBF laser, hours	10000 operational, 40000 standby
Environmental sealing for	IP67
Cooling Interface	Passive Cooling
Weight, kg	~ 2
Dimensions, mm NTE (see Figure 1.)	L166 x H108 x W102

Scan example is presented in Figure 2.

Specifications in this document subject to change without notice.



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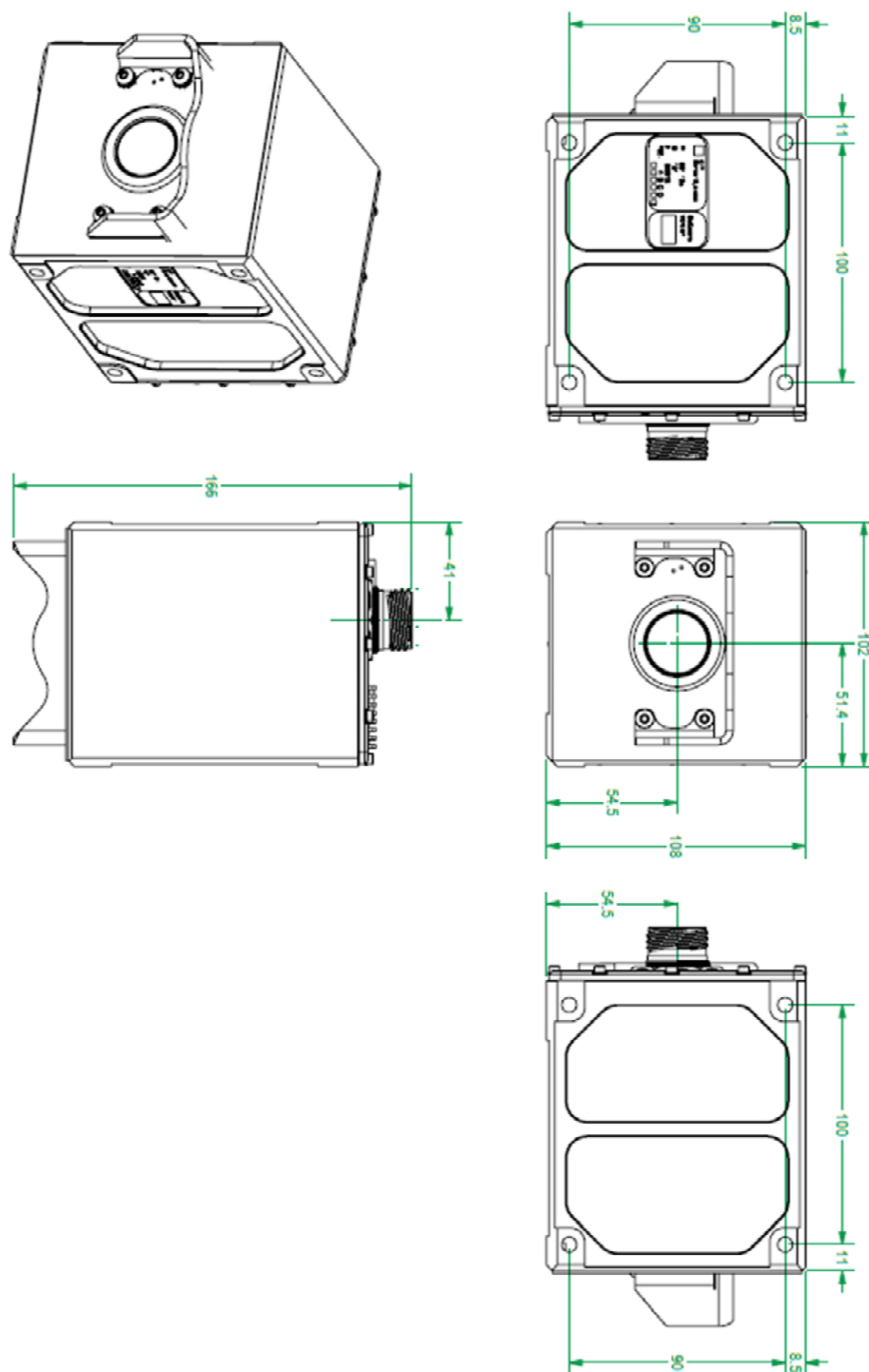


Figure 1. Mechanical Interface Drawing

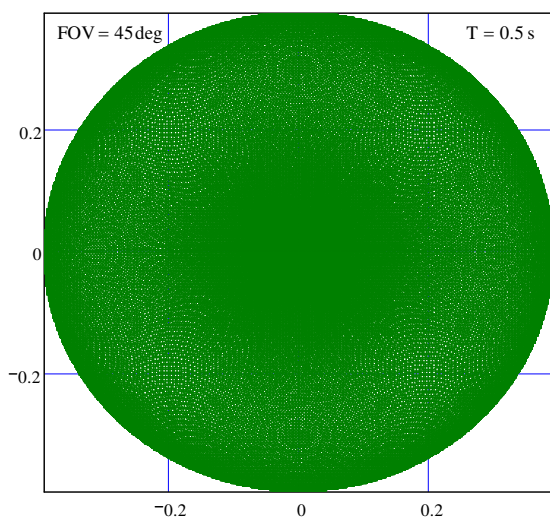


Figure 2 a

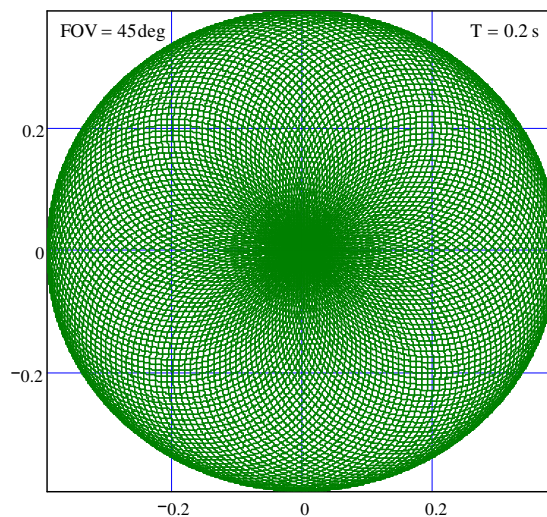


Figure 2 b

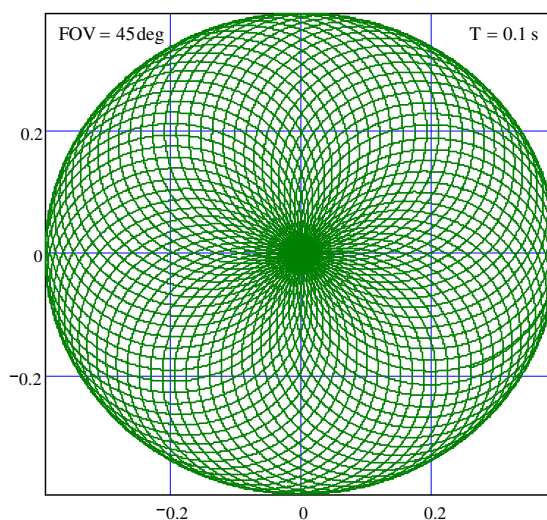


Figure 2 b

Figure 2 Scan pattern, single frame for frame rates a) 2fps b) 5fps, c) 10fps