

3D Laser Scanner optimized for Autonomous Mobile Robot

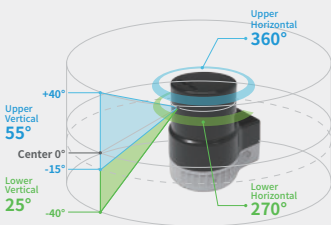
# YUJIN 3D LiDAR



YRL3V2-05/10/25

ROS

## Selectable Scanning Modes



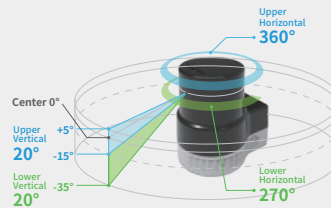
### MODE 1(Default)

- 360° x 55° (+40° ~ -15°),
- 270° x 25° (-15° ~ -40°)



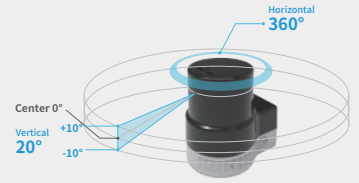
### MODE 2

- 360° x 40° (+35° ~ -5°)



### MODE 3

- 360° x 20° (+5° ~ -15°),
- 270° x 20° (-15° ~ -35°)



### MODE 4

- 360° x 20° (+10° ~ -10°)

## Widen Your Vision

YUJIN LiDAR is an enhanced direct ToF (Time of Flight) 3D LiDAR (Light Detection And Ranging) optimized for mapping, object detection, navigation, and other applications in Robotics.



Field of View



Enclosure Rating



Eye Safe



Selectable Scanning Modes

## Applications



@Robotnik



@GoCart

## Key Features

- ✓ Single Channel & Wide FoV (Max 360° x 80°)
- ✓ Selectable Scanning Modes
- ✓ ROS compatible
- ✓ Maximum range 25m

# 3D Laser Scanner optimized for Autonomous Mobile Robot

# YUJIN LiDAR

## Basic Specification

Model Name	YRL3V2-05	YRL3V2-10	YRL3V2-25
Detection Range	5 m	10 m	25 m
Size	65 mm x 85 mm x 91.4 mm (2.55" x 3.34" x 3.59")		
Weight	410 g (0.90 lbs)		
Power Consumption	6 W		
Supply Voltage	DC 12 V		
Light Source	Laser Diode		
Laser Class	Class 1, Eye Safe (IEC 60825-1:2014)		
Laser Wavelength	905 nm		

## Interface

Communication Interface	100 Mbps Ethernet
Optical Indicators	1 x LED (Green: Available, Red: Error)
Protocol	UDP packet
Configuration Software	YUJIN LiDAR Viewer
Output Data	Horizontal Angle, Vertical Angle, Range, Intensity, Cartesian coordinates (x, y, z)
Electrical Connection	1 x M8 for Power, 1 x M12 for Data
Materials	Window (PC), Case (AL)
Enclosure Rating (IP)	IP67

## Performance

Scanning Mode	Mode 1 (Default)	Mode 2	Mode 3	Mode 4
FoV: Horizontal x Vertical	<ul style="list-style-type: none"> <li>• Upper: 360° x 55° (+40° ~ -15°)</li> <li>• Lower: 270° x 25° (-15° ~ -40°)</li> </ul>	<ul style="list-style-type: none"> <li>• 360° x 40° (+35° ~ -5°)</li> </ul>	<ul style="list-style-type: none"> <li>• Upper: 360° x 20° (+5° ~ -15°),</li> <li>• Lower: 270° x 20° (-15° ~ -35°)</li> </ul>	<ul style="list-style-type: none"> <li>• 360° x 20° (+10° ~ -10°)</li> </ul>
Horizontal Scan Frequency	20 Hz			
Vertical Scan Frequency	15.5 Hz			10.7 Hz
Horizontal Angular Resolution	0.24°			
Vertical Angular Resolution	0.1°	0.05°		
Range Resolution	<10 mm			
Data Packet Rate	30,000			
Accuracy	Within 15 m: ± 50 mm, 15 m or more: ± 100 mm			
Temperature Resistance	-10° ~ +50°C			
Certificate	KC, CE, RoHS			

\* Specifications and design are subject to change without any prior notice.

## Product Dimension

