



AUTONOMICS

RADAR

Software-defined mmWave 4D imaging radar
for service robots.

Q4 2022

RADAR

Features

- 1: **High resolution in a wide field of view**
(up to 1.3°)



- 2: **Obstacles detection in any lighting and weather conditions**



- 3: **Software-defined characteristics**
to fit vast range of applications

- 4: AUTONOMICS RADAR and AUTONOMICS STEREOCAM smart stereo camera **data fusion** provides unprecedented level of **safety, situational awareness and cost efficiency** of your robots.



- 5: **Low power consumption**
(<15W) and wide power supply range

- 6: **Quick and easy integration**
via Gigabit Ethernet or CAN,
compatibility with ROS



RADAR



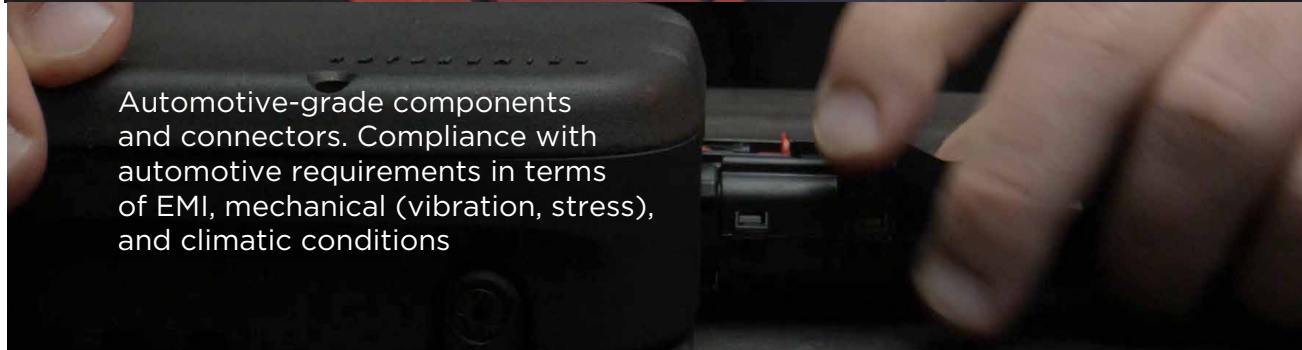
Specifications

Software-defined* Mode	Short-range	Long-range
Operating Frequency	77 - 81 GHz	
Detection Range	0.2 m - 50 m	0.4 m - 150 m
Max Velocity	±10 m/s	
Azimuth Field of View	140°	90°
Elevation Field of View	30°	
Range Resolution	<0.1 m	<0.3 m
Range Accuracy	0.05 m	0.15 m
Velocity Resolution	<0.15 m/s	
Velocity Accuracy	0.075 m/s	
Azimuth Resolution	< 1.5° (at <50° from boresight)	
Azimuth Accuracy	0.25°	
Elevation Resolution	20°	
Elevation Accuracy	1°	
Update Rate, FPS	10 Hz	
Operating Voltage	9 - 36 V	
Power Consumption	<15 W	
Dimensions (WxHxD mm)	203x110x45	
Interface (Data Output Interface)	CAN, Ethernet	
Dust and moisture resistance (IP Rating Target)	IP67	

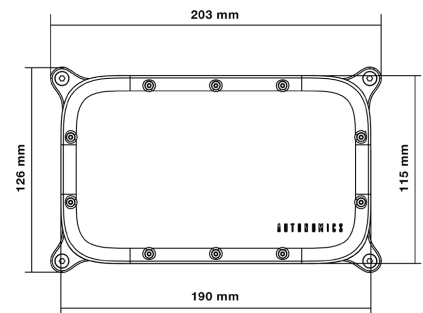
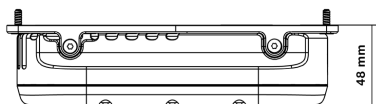
*It is possible to adjust the characteristics of AUTONOMICSRADAR software to the specific parameters of detection range and resolution

RADAR

Features



Dimensions



Find more information at autonomics.tech