



Rearsense Side Defender Radar

The most advanced side object detection radar available

The industry's most advanced heavy duty side object detection and collision mitigation solution for heavy duty vehicle operators

Key Advantages

- Provides blind spot protection on the left side of the vehicle
- Assists in avoiding potential collisions with other vehicles while navigating lanes, vehicles, pedestrians, cyclists and objects when turning
- Wide field of view — tracking up to 16 targets for comprehensive blind zone coverage

FLEXIBLE

- Intelligent operating modes – road and motorway driving application and side turn assist applications for more densely populated areas
- Ability to link to CAN Bus systems

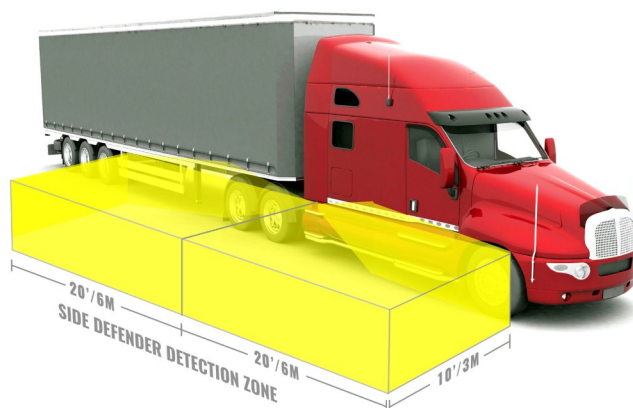
RELIABLE

- Measures range, speed and angle and other parameters of multiple stationary and moving targets simultaneously
- Built-in sensor failure alert
- Provides in-cab audible and visual alerts

ROBUST

- Rugged design — engineered to operate in all weather conditions
- Electrically and mechanically hardened— built to last
- Maintenance free

Product Features



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Technical Specifications

Environmentally Hardened
Polycarbonate Radome

0.45kg
Depth: 3.3cm



10.3cm

12.5cm

Measuring Performance	
Range	6.1M forward & aft of sensor (10dBsm target)
Side-lane Range	3M
Range Accuracy	0.3M
Azimuth Field of View	±75 degrees (10dBsm target)
Elevation Field of View	±8 degrees (10dBsm target)
Angle Accuracy	±2° @ ±10° FOV, ±5° @ ±30° FOV, ±10° @ ±75° FOV
Velocity Range	±31 metres/sec
Velocity Accuracy	0.2 metres/sec
Target Resolution (Targets Merge)	1.4M for static targets, approaching 0.3M for dynamic
Target Update Rate	120ms

Operating Conditions	
Centre Frequency	24.125 GHz (ISM Band)
Bandwidth	240MHz
Regulatory	FCC Part 15.249 EU ETSI EN300-440 Narrowband 24GHz legal in most countries
Power Supply	9 – 33VDC
Current	<0.5A
Operating Temperature	-40C to +85C
Shock	50G
Vibration	25G, random, all three axis
Protection Rating	IP69K
Mounting Height	45cm – 60cm from bottom of sensor to ground
Mounting Position	Perpendicular to ground and parallel to vehicle body
Protocol layer	SAE J1939 Extended (CAN-bus)
Data Update Rate	70 ms