

Side Defender

Radar detection



Side object detection and collision mitigation for heavy duty vehicle operators



Key Advantage:

- 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

Features:

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

Specs:

Measuring Performance

Range: 6.1M forward & aft of sensor (10dBsm target)
Side-lane Range: 3M
Range Accuracy: 0.3M
Azimuth FOV: 75 degrees (10dBsm target)
Elevation FOV: 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