



# Ultra-Short Range Radar Sensor

Motion Kick Sensor

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## Product Overview

SAYKAL Radar Sensor; It is an innovative, robust, and reliable electronic sensing unit developed for the automotive industry and containing new-generation technologies. It is customized for out-of-cabin applications. AP007 is a high-performance ultra-short-range radar sensor operating in the 60 GHz band for various premium backward & forward-looking applications. Motion Kick Sensor System detects foot movement under the rear bumper and enhances access comfort.



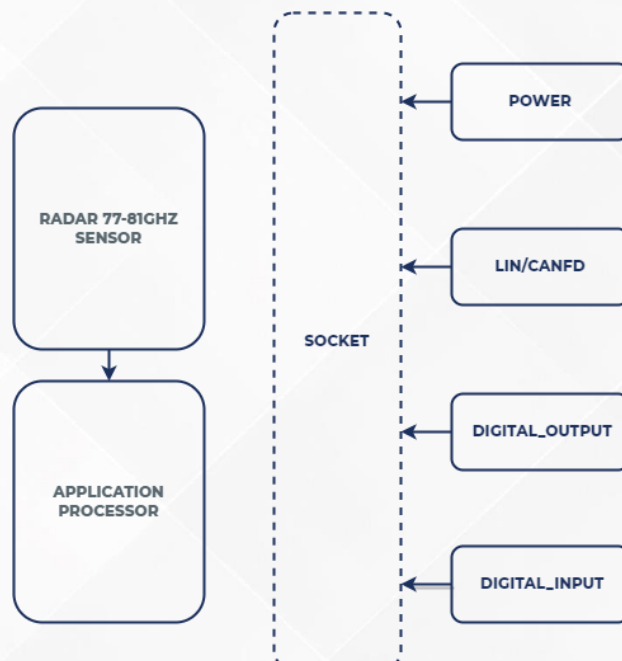
## Applications

- Automotive Motion Kick Sensor
- Smart home security devices
- Smart home, kitchen, and bathroom appliances
- Smart lighting, camera systems

## Hardware Features

- 3.3V – 38V DC Input
- Automotive Reverse Polarity Protection
- LIN or CAN
- 1 x Digital Output with OCP
- 1 x Digital Input

## Functional Block Diagram



## Software Features

- High Precision
- Dynamic object detection up to 150°
- Configurable Sensor position and tilt
- Configurable sensing distance
- Configurable sensibility
- Detection of direction and motion



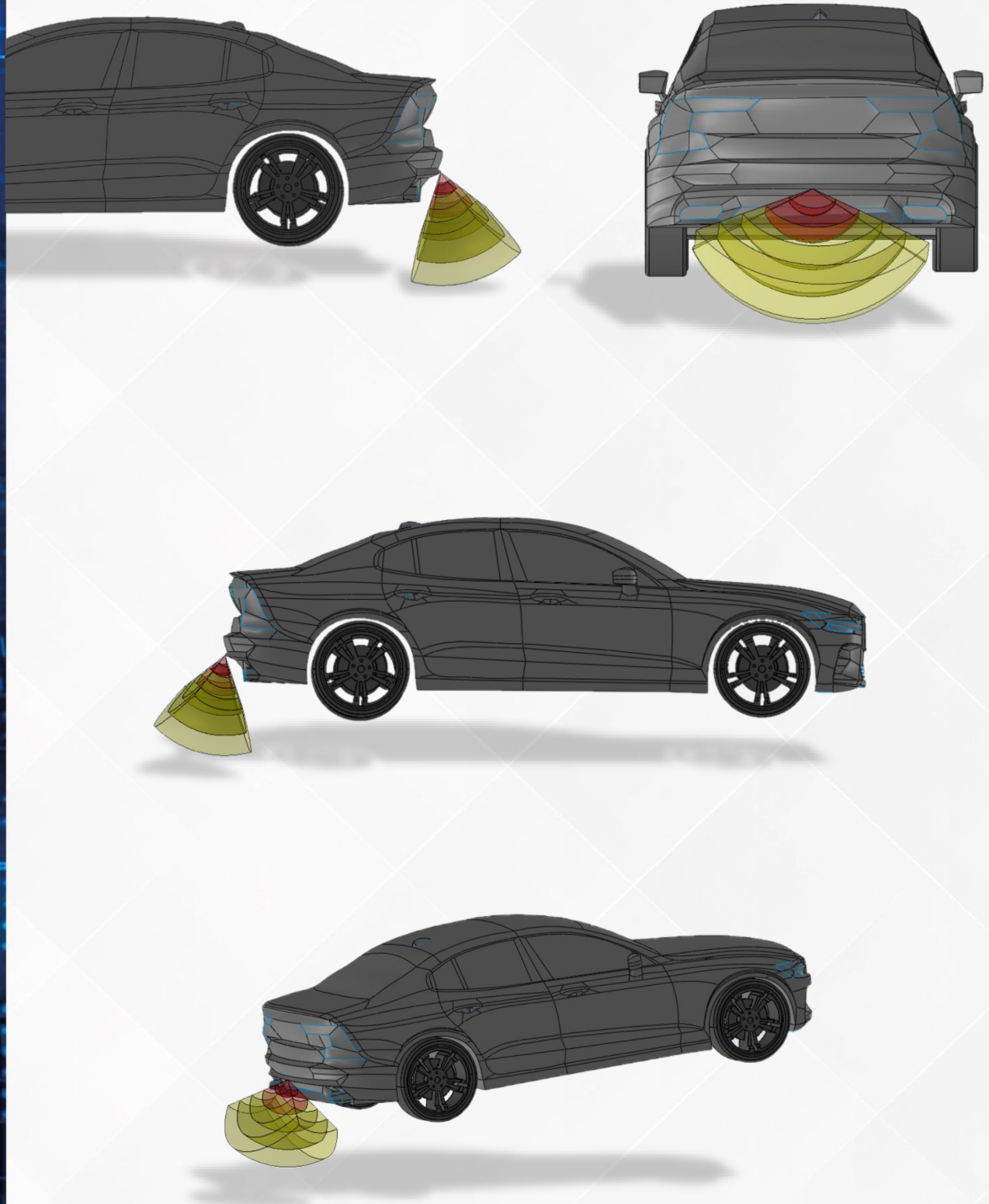


## Typical Application Features

- Sensor calibrates itself by identifying the surface on placed.
- Optional Input-Output controller; target detection alerts (visual and/or audible)
- Capability of CAN-Bus features
- Capability of LIN-Bus features

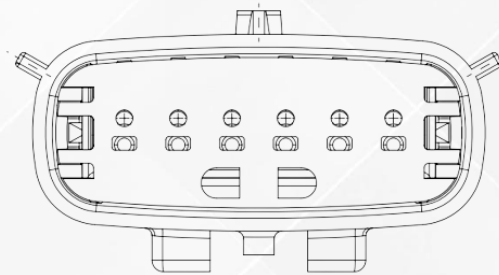
## Application Example on Vehicle

- Rear Bumper

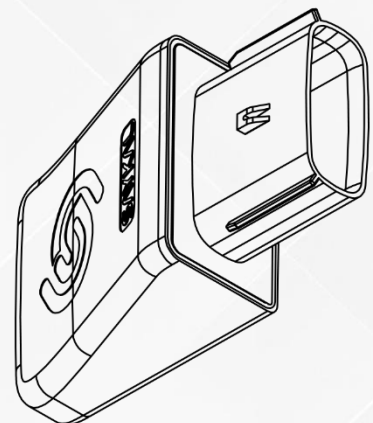
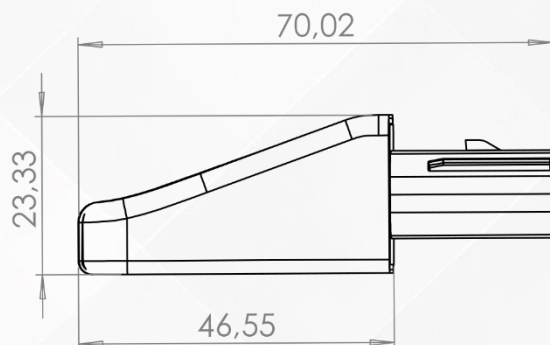
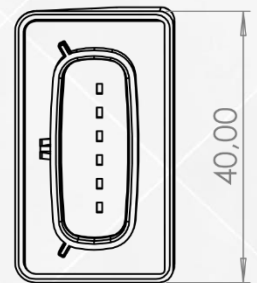
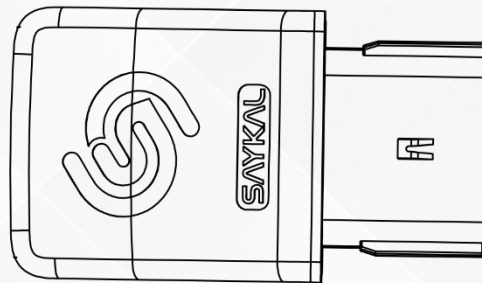


## Pin Out / Pin Names and Descriptions

PIN	NAME	DESCRIPTION
1	DC_IN	Supply Voltage, 3.3V / 36V
2	GND	Chassis Ground
3	D_OUT	Low Side Switch with OCP
4	LIN	LIN BUS
5	CANL	Controller Area Network
6	CANH	Controller Area Network



## Package Outline and Branding Drawing



## Important Notice

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