

Component Technical Specification

Radar Sensor

v 1.2

2017-03-20

Revision history

Version	Description	Date
1.2	Reviewed, minor findings fixed	2017-03-20
1.1	Reviewed, minor findings fixed	2017-03-17
1.0	Initial draft version	2017-03-01

Functional description – Radar Sensor

The Radar Sensor is responsible for detecting objects in front of the vehicle, and providing information to the Communication Bus about their position and speed.

The Sensor shall be able to detect following types of objects:

- car
- pedestrian
- cyclist
- tree

Field of view shall be configurable in the following range:

- 20-250 m
- 10-85 degrees

The Sensor shall provide the following information about the detected object(s) to the Communication Bus:

- Longitudinal relative velocity (v_x)
- Longitudinal distance from ego
- Lateral relative velocity (v_y)
- Lateral distance from ego
- Object size

The Sensor shall be able to detect up to 5 objects.

The sensor may filter out non relevant objects, if there are too many detected objects in field of view.