

ODAWS

ONBOARD DRIVER ASSISTANCE AND WARNING SYSTEM

ODAWS incorporates vehicle-borne sensors for monitoring driver propensity and vehicle surroundings to deliver acoustic and visual alerts for driver assistance. It is an integration of sub-modules such as the navigational unit, driver assistance console, and mmWave radar sensor.

The positional and dynamic characteristics of surrounding vehicles are probed using mmWave radar sensors. The navigational sensor provides a precise geo-spatial orientation of the vehicle as well as trends in driving behaviour. The ODAWS algorithm is used to interpret sensor data and offers notifications to the driver in real-time, enhancing road safety.

FEATURES

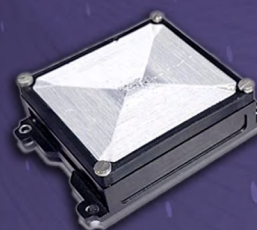
- ▶ Vehicle mountable
- ▶ Automotive grade design
- ▶ Multiple obstacle detection / tracking
- ▶ Realtime data acquisition and assistance algorithm
- ▶ Light-weight with compact form factor
- ▶ Built-in calibration and self-test
- ▶ Supports automotive interface
- ▶ Data-logging feature



mmWave

SPECIFICATIONS

Operating Frequency Range	77-81 GHz
Bandwidth	4 GHz
No. of Channels	4 Rx Channels and 2 Tx Channels
Operating Voltage	12 V
Maximum Range	60 m
Maximum Field of View (FoV)	±60 degree
Power Consumption	3 W
System Updation Rate	10 Hz
Dimension	57 mm x 57mm



Navigation Module

Navigation Sensors	GPS, Accelerometer, Gyroscope & Magnetometer
Operating Voltage	9-36 V
Power Consumption	1.44 W
System Updation Rate	10 Hz
Dimension	88 mm

