

HOD

Hands Off Detection Sensing System



Accurate driver engagement monitoring on the steering wheel

Today, more and more advanced driver assistance and automated driving systems are being offered and developed by vehicle manufacturers. While today's assistance systems require the driver to keep its hands on the steering wheel, the automated driving will give the driver the freedom to cede vehicle control and do other tasks. But even then, there are still situations in which the vehicle needs to give the driving function back to the driver. Hence it is crucial to know via hands on/off detection who controls the vehicle. Vehicle safety regulations nowadays require hands on/off sensing for various functions such as Lane Keeping Assist Systems (UN R79) Driver Control Assistance Systems (UNR 171) and Automated Lane Keeping Systems (UN R157).

IEE has developed a capacitive sensing system that integrates into the steering wheel, the perfect solution to monitor whether the driver's hand is on the steering wheel and is in control of the vehicle.

Need a customized solution?

If you want to talk about customization options, price, availability or other related to our products

Let's talk

iee-sensing.com



Why choose our system

01 Smooth integration

Flexible sensor mat that smoothly integrates into any steering wheel, suitable for any steering wheel supplier.

02 Human touch

Detects human contact with the steering wheel.
Dual-zone variant for touch and grasp distinction.

03 Fast and reliable

Notifies the vehicle within less than half a second when the driver does not have one hand on the wheel. Reliable detection in all traffic circumstances.

04 No active steering needed

Reliable detection in all traffic circumstances.

05 Robust

Compatible with steering wheel heaters, not impacted by water or humidity.

06 Regulations

Helps OEMs to be compliant with current vehicle regulations.

The HOD system has the potential to support the following

- Deactivation of automated parking. When it recognizes that the driver placed a hand on the steering wheel, it can alert the automatic parking system, allowing it to deactivate.
- Automated driving. In automated vehicles, knowing whether the driver controls the vehicle (hands on), or if the vehicle is in self-driving control mode (hands off), is crucial. Especially the transition phase between the manual and automated driving modes requires precise hands on/off information.



Awarded technology for superior innovation, technological advancement and business performance

IEE has gathered unparalleled experience in electrical field sensing, and our safety-related devices have equipped millions of cars for major auto manufacturers around the world. Millions of cars have already been equipped with our HOD sensor.



Automotive News PACE Award
Driving Systems & Safety Category
2018



a
sense
for
innovation
IEE

