







## **Radar Technology**

Millimeter wave radar technology for safe and stress free driving.

#### **Millimeter Wave Radar**

The Elesys Millimeter Wave Radar operates by emitting a 76 GHz radio signal in a predefined direction through a transmitter. The waves reflected by objects located within the radar's detection range are then received back by a receiver module and processed to determine the distance and relative speed of those objects. This information can then be used to maintain safe distance or stop if necessary to avoid collision.

### ACC: Adaptive Cruise Control

The ACC system, is based on our proprietary 76GHz radar technology. The radar detects objects in its path and monitors both the distance and speed of the vehicle in front. By tracking a preceding vehicle, the ACC system provides automatic acceleration and deceleration to maintain a desired or safe distance. This in turn provides the driver with a safer, more comfortable, and stress free driving experience.

#### CMBS: Collision Mitigation and Braking System

The Elesys Collision Mitigation and Braking System (CMBS) works in conjunction with ACC to provide full braking in emergency situations. CMBS will first alert the driver through an audio and visual warning. Next, it will apply moderate braking to slow the vehicle and engage the E-Prensioner to "tug" the seat belt to notify the driver. Then, if needed, it will engage stronger braking power to avoid or mitigate the effects of a collision.

### **Benefits**

- Both near and far range detection capabilities
- Wider detection range & pedestrian detection at various environmental conditions

# **Specifications**

- Frequency: 76Ghz
- Detection Range: 150m
- Dimensions: W99.3 x H90.4 x D39.1 (mm)
- Horizontal Viewing Angle: 16/40 Degrees (Far Range/Near Range)

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