

# **Ultrasonic Parking Sensor**Passive Safety and Sensorics

- Continental Ultrasonic Sensor (CUS) is completing Continental's Automated Driving/Parking (AD/P) product portfolio.
- CUS for Parking, is a sensor dedicated to be used in low speed maneuvering situations (Speed < 10 km/hour). It measures the time of flight to an object (Echo-Localization principle).
- The sensor sends an ultrasound echo (wave) and receives a signal (wave reflection by an object) after a certain period of time. The time of flight is converted to a measured distance. Software in the ECU processes these measurements and determines the appropriate actions to take.





#### **Ultrasonic Parking Sensor**

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#### **Benefits & Features**

- Easy and precise parking
- Stress free vehicle maneuverability
- > 360-degree car protection
- > Environment visualization and monitoring
- Compliance with major OEM requirements
- Coding among sensors and Multi measurement
- Self diagnostics
- Signal filtering
- ASIL-B according to ISO 26262
- Paintable



#### **Technical Information**

- Supply voltage range: +9V ...+16V
- Operating temp range: -40 ... +85°C
- ) IP classification: IP6K9K
- Diameter: 15.5 mm
- Frequency: 52 KHz
- Car connectivity P2P or bus
- Car communication DSI3 interface
- 3 pins per sensor group
- Detection ranges target: <10 cm up to 600 cm</p>
- ) Opening angles: 120° x 60°

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#### **CUS - Advantages**

- Dynamic range mode
  - Parking Slot Detection mode (PLV) in one design type. This leads to the reduction of design variance in the vehicle architecture.
- > Higher signal robustness against disturbance
  - Echo source identification is reliable and robust (identifying own transmitted signals)
- Continuous signal transmission (sensors fire parallel to another) supporting higher data rates vs. sequential signal transmission with competing sensor generation
  - Improvements compared to competing sensors
  - Supports automated driving/safety levels with higher maximum operation speed for emergency braking



### **More Information**

#### Get in touch with us!



More information:

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