

Continental have launched a new short-range radar which provides more precise detection of vehicle surroundings. In place of the 24 GHz technology used up to now, the new radar generation operates using 77 GHz technology to detect the environment at a much higher resolution and level of accuracy. Consequently, it is able to detect other road users and obstacles more precisely and also better detects movement directions and speeds.



Integration density has been further increased and individual components, such as the antenna and the radio-frequency chip, are now housed in a smaller space, making the sensor more compact for easier fitment in the vehicle. One of the new radar sensors can be positioned at each of the four corners of the vehicle body to ensure almost seamless 360° monitoring of the surroundings. Radar systems of this type already form the basis for various advanced driver assistance systems employing sensors.

These include Right-Turn Assist (Left-Turn Assist on RHD cars) which makes turning off safer and can, for example, detect a cyclist approaching from behind the vehicle on the passenger side. The system intervenes if the driver wants to turn when the cyclist is just about to pass alongside the vehicle. Drivers can't always detect this risky situation, even when they look over their shoulders. If the radar sensors detect a cyclist in such a situation, they transmit an appropriate signal to the brakes and the car stops before the car and cyclist collide.

Accident research shows such a turn assist system for passenger cars could help prevent more than 5% of all accidents in which cyclists are killed or seriously injured. Cornering assistance systems will be mandatory across the EU for all new trucks from 2020 on.