

Attingimus Radar Sensors

- Speed over Ground -

Basics of Speed over Ground

Speed over Ground Radar sensors are high-precision speed sensors that measure the absolute speed of an attached vehicle.

Advantages of SoG Radars

Unlike others, e.g. mechanical speed sensors, Radar sensors are characterized by high precision and an unbiased measurement, since the speed is measured directly relative to the ground. Measuring errors due to slipping on wet or uneven terrain do not occur.

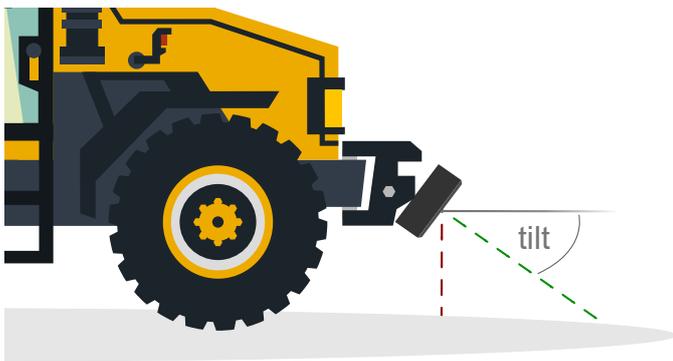
Due to the non-contact measurement by Radar waves, the sensor also suffers from less material abrasion than contact-based speed sensors.

Positioning and Orientation

When mounting a speed Radar, pay close attention to the correct orientation of the sensors.

Radar speed sensors measure the speed of the ground relative to the sensor. When a speed sensor is mounted on a vehicle, care must be taken that it has a clear view of the ground.

To measure the correct speed of a vehicle, a Radar sensor with a certain slope to the ground must be installed.



Measuring Range

Depending on the product variant, we can cover speed ranges from 1 km / h up to more than 1000 km / h with very high precision.

With more than 15 years experience in the supply of speed sensors to European authorities and other customers with the highest standards, we can advise which SoG Radar best suits your needs.

Applications

Our Radars are used for high-precision speed measurement. These are often slow speeds under difficult ground conditions that cause the tires to slip. Application examples are road rollers or machines such as spreaders or sprayers, which require a constant speed or an adjustment of the material output to the vehicle speed.



Digital Output

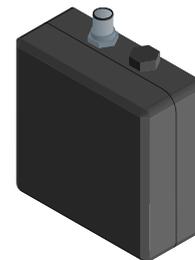
The Radar sends data in the form of a telegram. Every 10 milliseconds a telegram is sent. In addition to technical information, it contains the measured values such as distance or speed in metric values. The data is formatted in 8- or 16-bit integers. The fast response time provides real-time vehicle speed information and additional status information.

Sample Telegram:

Byte Nr.	Data	
0	0x7E	Header bytes
1	0x7E	
2	0x7E	
3	0x7E	
4	distance in cm - lower byte	Data bytes
5	distance in cm - higher byte	
6	speed in cm/s - lower byte	
8	speed in cm/s - higher byte	
9	signalstrength in dB	

Housing Properties

All our Radars have an IP67 / IP69k certified housing made of POM and an anodized aluminum alloy. It is designed for best performance with maximum protection and maximum compactness.



Due to our focus on longevity and durability, our Radar systems have been under harshest conditions for more than 10 years, for example in port areas or on construction sites.