

Speed sensor AccoSat

Product Overview

True ground speed for Off-Highway Vehicles



The **MSO AccoSat** is a speed sensor based on DGPS and a 3D accelerometer. By means of this sensor fusion the system reacts rapidly on acceleration (start and stop). This is especially advantageous for monitoring, control and closed-loop control on off-highway and agricultural machinery.

The **AccoSat** system measures the forward speed by means of a triaxial accelerometer and a DGPS receiver. **AccoSat** deploys a DGPS receiver optimized for speed measurement. The speed measurement - in contrary to detection on gearbox or wheel - is unaffected by effective tyre circumference, sinking-in and wheel slip. This is particularly advantageous for all applications needing an accurate speed signal for example for product application proportional to distance / area e.g. seeding, spraying and spreading. The **AccoSat** System does achieve high accuracy, dynamics and reliability of the speed measurement by means of a sensor fusion of a 3D accelerometer with a DGPS receiver. The **AccoSat** provides for real time true ground speed for “outdoor / off - highway” applications for monitoring, control and closed loop control of machinery functions. Optionally DGPS positioning data (NMEA-0182) are output over a serial (RS232) interface.

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Benefits/Use

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- Exact measurement of speed over ground and distance covered independent on wheel slip, effective tyre circumference and sinking in of the tyre
- No calibration required
- High dynamics and update rate for monitoring of wheel slip, control and closed-loop control of application output
- Easy installation on a vehicle, possibly under plastic cover
- Unsusceptible to varying ground properties
- Standard pulse output proportional to speed according to DIN 9684 / ISO 11786, "Radar - compatible"
- Exact monitoring, control and closed-loop control of application rate proportional to forward speed / area covered
- Option: DGPS positioning (WAAS / Egnos diff. correction) with NMEA 0183 output for e.g. documentation, telematics

Technical Data

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Power supply	+10 VDC to +16 VDC
Current consumption	400 mA max
Operating temperature	-20 °C to +70 °C
Output signal	130 pulses / m (36,1 Hz km-1 h-1) acc. DIN 9684 / ISO 11786
Output signal update rate	25 Hz update rate
System accuracy	better than 0,1 m/s
Dimensions - less cable, with flaps	58,84 mm wide, 64 (94) mm long, 35 mm high
Vehicle installation	on the vehicle horizontally like the direction (arrow) shows

Download [AccoSat Data sheet](#) and further details on [request](#).