



Inertial Sensorbox 6DoF

Precise inertial measurement sensors providing reliable data

The 6DoF Inertial Measurement Unit provides the vehicle's current movement status to all connected devices. The verified signals of yaw, pitch and roll rate and longitudinal, lateral and vertical acceleration are transmitted to the data bus via standardized interface.

The signals are used in complex control algorithms to enhance comfort and safety applications for passenger and commercial vehicles (e.g. ESC, ADAS, AD) as well as for motorcycles (optimized curve ABS), industry and agricultural vehicles.

Applications

- › Traction Control
- › Semi Active Suspension
- › Adaptive/Active Lighting
- › Advanced Braking (e.g. Curve-ABS)
- › Automatic Stability Control

Features

- › Modular concept
- › Scalable up to six degrees of freedom (6DoF)
- › Applicable for ESC, ADAS and AD functions
- › Adaptable to automotive, motorcycle and industry markets
- › Combined rate and acceleration sensors
- › Enhanced sensor performance

Technical Specifications

Sensing Range	Yaw/Roll/Pitch Rate $\pm 300^\circ/\text{s}$; Acceleration (x/y/z) $\pm 59\text{m/s}$
Temperature Range	-40°C to +85°C
Supply Voltage	7V ... 17V
Supply Current	< 150mA
Digital Output	CAN
Connector Interface	4-Pin MQS
Mounting Footprint	62 mm
Tightness	IP6K9
Dimension	55 x 45 x 20 mm (l/w/h)

