Acceleration sensor and gyroscope combined

Gemac Chemnitz (Germany) has pre-announced a dynamic inclinometer featuring CANopen and J1939 connectivity.

Besides a broad range of inclinometers, the company located in Chemnitz has introduced a dynamic tilt sensor (Photo: Gemac)

The dynamic inclinometers provide angle measurements in moving applications. Combining an acceleration sensor with an angular rate sensor enables inclination measurements with a resolution of 0,01° and an accuracy better than ±2°. The one-dimensional measurement range is 360°, the two-dimensional versions feature ±90°.

The sensor comes with a CAN interface. Optionally, it supports CANopen (CiA 410 compliant) or J1939. The product is shock resistant up to 100 g. The integrated gyroscope compensates the measured inclination values. The sensors can be mounted horizontally or vertically. They are intended for use in mobile machinery.

The company offers also inclinometers without gyroscopes. These products suppress just vibrations by means of digital filters. They are combined with angular rate sensor compensating accelerations.

The company was originally established in 1992. This year, the company has been renamed to Gemac Chemnitz. Besides the inclinometers, it provides several CAN diagnostic tools. This includes protocol analyzers (CANopen, Devicenet, and J1939) and physical layer monitoring tools. There is also the CAN-Bus Tester 2 introduced originally in 2002. The company was part of the SPS IPC Drives 2017.

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