

AMU-GEO 360 Angle Sensor - CANopen

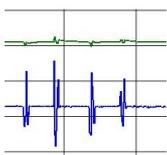
New AMU-GEO series inclinometers offer better dynamic accuracy by compensations of vibrations, shocks and centrifugal acceleration. Wide operation temperature and supply voltage range makes the sensors optimal for use especially in mobile boom control applications.



- CiA-410 compliant inclinometer profile
- Measurement range from -180° to $+180^{\circ}$
- Compensation of vibration and shocks
- Resolution $0,01^{\circ}$, Static accuracy $\pm 0.3^{\circ}$ @ 25°C
- Dynamic accuracy of $\pm 0.7^{\circ}$ @ 25°C
- Suppress Centrifugal / Linear acceleration by up to 90%
- Supply voltage from 9V to 32V
- Operating temperature range from -40°C to $+80^{\circ}\text{C}$
- Environmental protection IP67
- One or two 5-pin A-coded M12 connectors
- Standard CiA-303-1 pinout

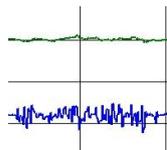
Reliable operation

Compensations provide more accurate operation than the traditional, uncompensated devices, under practical work. Compensations include shocks, vibrations and centrifugal acceleration in the direction of rotating axis. Compensations are especially targeted for the use in boom angle measurements of mobile equipment.



Chock Resistance

The green line from the AMU-GEO 360 shows how chocks are eliminated. The blue line is from a traditional accelerometer based angle sensor.



Vibration Resistance

The green line from AMU-GEO 360 shows how well the gyro stabilization removes vibration, compared to the blue line from a traditional accelerometer based and filtered angle sensor.

Standardized interfaces

AMU series inclinometers are CANopen certified. Basic communication services comply with CiA-301 and CiA-305. Inclinometer specific interface complies with CANopen device profile for inclinometers, CiA-410. Physical layer meets ISO 11898-2 and M12 connector pinout follows CiA-303-1. Standardized system integration interface enables a simple upgrade of the existing, uncompensated inclinometers.

Dedicated for outdoor use

Wide ambient operating temperature range, IP67 protection class and wide supply voltage range make the inclinometer attractive for mobile and outdoor applications.

Partnership

The device is a joint development between TK Engineering Oy and the 3B6 division of C.O.B.O. group, based on the proven AMU series of inclinometers.