

CANOPEN INCLINOMETER

Compensation for vibration and shock

Together with 3B6, TK Engineering Oy (Finland) has launched the AMU-GEO series inclinometers. They offer dynamic accuracy through the compensation of vibration, shock, and centrifugal acceleration.

COMPENSATIONS PROVIDE MORE ACCURATE OPERATION THAN the traditional, uncompensated devices. Accuracy lies at $\pm 0,5^\circ$ dynamic and $\pm 0,3^\circ$ static.

Compensations are included for shock, vibration, and centrifugal acceleration in the direction of the rotating axis. Compensations are especially targeted for the use in boom angle measurements of mobile equipment. An operating temperature of -40°C to 65°C , a supply voltage range from 9 V to 32 V, and protection class IP67 make the sensors suitable for use in mobile and outdoor applications, especially in mobile boom control applications.

(Photo: TKE)

Standardized interfaces

The AMU series inclinometers are CANopen certified. The basic communication services comply with CiA 301 and CiA 305. The inclinometer specific interface complies with the CANopen device profile for inclinometers, CiA 410. The physical layer meets ISO 11898-2 and the M12 connector pinout follows CiA 303-1. A standardized system integration interface enables an upgrade of the existing, uncompensated inclinometers.

The device is based on the AMU series inclinometers developed and manufactured by the 3B6 division of C.O.B.O group. The CANopen implementation and the compensation algorithms have been developed by TKE Oy. All devices are manufactured by 3B6.