

# ABSOLUTE ORIENTATION SENSOR

## PART NO. CAEAO5



## GENERAL OPERATION

The AOS distinguishes itself from the general inclinometer products on the market today, by delivering a precise angle, even when stressed with vibration, acceleration, shock and temperature variations. The AOS sensor combines 3 different sensors: accelerometer, gyro and a magnetometer. This gives the AOS 9 degrees of freedom. The individual sensor data is fused together to calculate the angle in relation to centre of gravity. The AOS is designed for use in vehicles and mobile machinery.

## PRODUCT OVERVIEW

- Operating ambient temperature -40° to +85°C
- Dimensions: D:60xH:22mm Fastening pattern CC 50mm.
- IP 67 protection rating.

## **Communication**

- Supports CAN 2.0A and 2.0B with bus speed up to 1Mbit/s
- Electrum is a member of CAN in Automation and supports the CANopen protocol
- Default CANopen node id: 2
- Default CANopen baud rate: 250kbit/s

## **Suitable Applications:**

- Cost sensitive applications.
- Dynamic applications, such as capturing the angle of a fast-moving object with fast response and good accuracy.
- Capturing the angle of an object in rough conditions where vibrations and acceleration are commonly present.
- Measure acceleration forces of an object to determine how it is being used by the customer.