

SOLID STATE INCLINOMETER

Leading Anderson's line of sensors is our fully solid-state inclinometer. Our customers use it to measure angle with respect to gravity in 1, 2 or 3 axes, and we can provide various output types - CANbus via SAE-J1939 being the most common, we also provide two 0.5–4.5V or 4–20mA outputs. It's urethane potted for extreme durability and environmental reliability. They're precise with resolution down to as low as 0.06° and accuracies of $\pm 0.3^\circ$ or better are typical, depending on output type.

Our standard version (A30035A) gives two axes of inclination over both J1939 and discrete analog outputs simultaneously. The analog outputs can be configured (over CAN) for either 0–5V or 4–20mA output. As well, the inclination range for each axis can be independently changed from the factory setting of $\pm 25^\circ$ to min/max position.

They're a great fit for lots of different applications. They're commonly used to measure boom angle, machine/platform level, bucket level, or as a basic, much more durable and economical tilt switch. They're aggressively priced as a standalone sensor, and really easily integrated into our larger control systems.

GENERAL

Range	0-360° for rotation, $\pm 45^\circ$ for 2-axis tilt
Resolution	0.06°
Accuracy	$\pm 0.3^\circ$ typical
Output	0.5 to 4.5, 4–20 mA, CAN, SAE-J1939
Housing material	Encapsulated UL94 ABS plastic
Weight	2.0oz (57g)

ENVIRONMENTAL

Operating Temperature	-40° C to +85° C
Storage Temperature	-50° C to +100° C
Protection Class	IP67

ELECTRICAL

Protection Types	Reverse polarity, over-voltage
Supply Voltage	9–30VDC
Supply Current	25mA for CAN and Voltage outputs. 70mA for 4–20mA outputs

