

Description

SIN01 Inclinometer Sensor is a compact dual-axis inclinometer.

Adopting the latest technology, with precision engineering from MEMS, this product has low power Consumption. It has excellent consistency and stability.

It's working temperature is -40 °C ~85 °C.

A non-contact measurement principle is adopted to simultaneously output the pitch and roll inclination angles.

It can be easily operated and installed without knowing the exact "flat plane".

It has the latest MEMS sensor production technique which is characterized by high accuracy, small size, strong anti-electro-magnetic interference capacity, and great shockproof property. This product is perfect for vehicles and caravans.



Technical Specification

Electrical Characteristic

Power supply (Unregulated voltage)	9 – 35 V (Typical 12V)
Operating current (Non-loaded)	20 - 60 mA (Typical 50mA)
Operating temperature	- 40 – +85 °C
Store temperature	- 55 – +100 °C

Performance

Size (LxWxH)	91×40×26mm	Weight	150g
Measuring range	± 30°	Measuring axis	X-Y
Zero point output	2.5(5) V	Zero temperature drift (-40°C-85°C)	± 0.01°/°C
Full scale output voltage	0-5V	Sensitivity error (25°C)	± 1%
Frequency response (DC)	100Hz	Output noise density (DC 100Hz)	0.0025
Resolution	0.02°	Accuracy	0.2°
Shock resistance	2000g,0.5m,- 3times/axis	Crossed sensitivity	Max 3%

Electrical Interfaces

Red	V In	Grey & Black	GND on both
Brown	X Out	Orange	Y Out

Mechanical Properties

Connector	Direct lead (1.5m)	Protection level	IP67
Shell material	Magnesium Aluminum	Installation	Four M4 screws

Installation

Keep the sensor installation surface parallel to the measured objective plane during installation. Reduce the impact of motion and acceleration on the sensor. The product can be installed only horizontally.

