

LE-60-OEM low-cost inclinometer

1.Product Highlights

LE-60-OEM is a low-cost dual-axis tilt sensor, by measuring the static acceleration of gravity changes, be converted into angle changes. Measuring the output of the sensor pitch and roll angle with respect to the horizontal plane.

(1) Low power, small size;

(2) Simple structure, high stability;

(3) Having a wide temperature operating range, and low temperature drift.

2.Technical Specifications

Key indicators (test conditions: room temperature 25 degrees, the voltage 5V / DC.)

index	Typical values	unit
responding speed	5	Hz
Measuring range	±80	°
Resolution	±0.06	°
Accuracy (<± 30 °)	±0.5	°
Accuracy (<± 45 °)	±1	°
Accuracy (<± 60 °)	±1.5	°
Accuracy (<± 80 °)	±2	°
Zero point repeatability	±0.06	°
Supply voltage	5	V
Working current	<15	mA
Operating temperature	-40 到 +80	°C

3.Communication interface and command format

A.Data Interface:

TTL level.

Data format: 9600, N, 8,1.

B.Data Output Format

Byte position	meaning	type of data	Explanation
1, 2	Header		0xAA,0xAA
3	Frame length	byte	All data except header length outside
4	address	byte	0Xxx (232 output address 2)
5	Command returns	byte	Returns received command word
6, 7	Retention		
8, 9	Retention		
10, 11	X-axis angle	Integer	Angle = integer / 100 (unit: degree) *
12, 13	Y axis angle	Integer	Angle = integer / 100 (unit: degree)
14	Retention	Integer	
15	check	byte	XOR checksum result of the preceding 14 bytes of data

NOTE: The standard two-byte integer, most significant bit = 0, which indicates a positive number, the highest bit = 1 indicates negative.

4.Dimensions and interface definitions

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Length 25mm, width 23mm (pin-up plan view)

