

ER-AS-95 Digital Three-Axis Acceleration Sensor

Introductions

ER-AS-95 Digital Three-Axis [Acceleration Sensor](#) is a series of widely used [accelerometer](#) products, which can be applied to vibration tests, impact tests and other fields. The product adopts digital interface output, CAN/CAN open is optional, different ID codes can be set, and multiple sensors can be connected in series for long distances to facilitate multi-point measurement data and data analysis.

Small size, low power consumption, calibrated, fixed structure, stable output. The new electronic configuration provides solid-state power for reset, provides full protection against overpowering, and provides long-term stability— deviation typical values of the scaling factor of less than 0.1% over the full range. This series of products have the characteristics of fixed structure, low power consumption, excellent deviation stability and so on, which guarantee stable output reliability.

Features

Three axes (X, Y, Z) are optional
Accuracy: 0.01g, resolution: 0.001g
Impact resistance: 2000g
Wide voltage input DC: 9 ~ 36V
Wide temperature working: -40 ~ +85℃
Industrial grade design
Excellent deviation stability, anti-vibration
Protection level IP67
Low volume (90 * 40 * 27 mm)
Output CAN/CAN open (optional)
Range $\pm 1g/\pm 2g/\pm 4g/\pm 8g/\pm 16g/\pm 32g/\pm 40g$ optional

Applications

Crash recording, fatigue monitoring and prediction
Satellite solar antenna positioning
Tractor, deep tillage machinery
Mining machinery, oil logging equipment

Medical equipment
 Cloud roadbed analysis
 Fault detection of high-speed railway
 Tilt based monitoring
 Various construction machinery Angle control
 Bridge dam, monitoring

Specifications

Parameter	Condition	ER-AS-95-02	ER-AS-95-08	ER-AS-95-40	Unit
Range	/	±2	±8	±40	g
Deviation calibration	/	<2	<5	<10	mg
To measure the axial	/	X、Y、Z	X、Y、Z	X、Y、Z	Axis
Annual deviation stability	/	1.5(<5)	7.5(<25)	22(<75)	mg
Resolution threshold	@Hz	<1	<5	<15	mg
Deviation temperature coefficient	-55~+100℃	0.1	0.5	1.5	mg/℃
Bandwidth	/	0~≥400	0~≥400	0~≥400	Hz
Resonance frequency	/	1.6	6.7	6.7	kHz
Rate	100Hz				
The output signal	CAN				
Reliability	MIL-HDBK-217, Shaped Tin Bar				
Impact resistant	20000g,2ms,1/2sine				
Shock resistant	10grms、10~1000Hz				
Waterproof level	IP67				
Cable	Standard 1.5 m length, wear resistance, oil proof, wide temperature, shielding cable 5*0.2mm²				
Weight	180g (excluding boxes)				
The connector	6 pins aviation plug				
Capacitive load	1000				