

AC-2: HIGH PRECISION QUARTZ ACCELEROMETER

■ PRODUCT DESCRIPTION

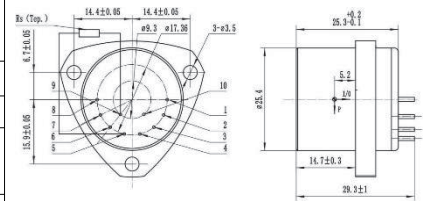


AC-2 quartz flexible accelerometer series is a high-precision military inertial navigation class accelerometer with excellent long-term stability, repeatability, start-up performance, environmental adaptability and high reliability. It can be used for both static and dynamic testing, and it is also a standard vibration sensor and inclination sensor. The output current of the product has a linear relationship with the force or acceleration received. Users can select the appropriate sampling resistance through calculation to achieve high precision output. And according to user needs built-in temperature sensor, used to offset value and scale factor compensation, reduce the impact of environmental temperature.

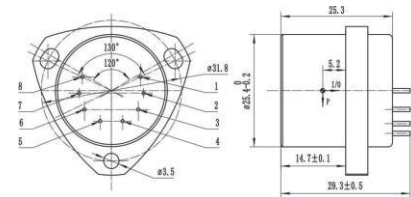
■ PRODUCT MAIN SPECIFICATION

Parameters	AC-2A	AC-2B	AC-2C	Unit
Range (40ohms)		±70		g
Threshold /Resolution	2	3	4	μg
Bias k0/k1	≤±3	≤±3	≤±5	mg
Scale factor k1	0.8 ~ 1.20			mA/g
Class II nonlinearity coefficient k2/k1	≤±10	≤±15	≤±20	μg /g ²
0g 4 hours short time stability	≤10	≤15	≤20	μg
1g 4 hours short time stability	≤10	≤15	≤20	ppm
Bias drift Sigma k0(1σ, one month)	≤10	≤20	≤30	μg
Repeatability of scale factor Sigma k1/k1 (1σ, one month)	≤15	≤30	≤50	ppm
Class II nonlinearity Coefficient repeatability k2/k1 (1σ, one month)	≤±10	≤±20	≤±30	μg /g ²
Bias thermal coefficient	≤±10	≤±30	≤±50	μg /°C
Scale factor thermal coefficient	≤±20	≤±30	≤±50	ppm /°C
Noise (sample resistance 840Ω)	≤5			mv
Natural Frequency	400~800			Hz
Bandwidth	800~2500			Hz
Vibration	6g			20~2000Hz
Shock	100g			8ms, 1/2s in
Temperature range (Operating)	-55~+85			°C
Temperature range (saved)	-60~+120			°C
Power	±12~±15			V
Consume current	≤±20			mA
Temp. sensor	Optional			
Size	Φ25.4X30			mm
Weight	≤80			g

■ PRODUCT DIMENSION



Install hole is U type



Install hole is U type, 8 pin

■ PRODUCT APPLICATION

- Inertial measurement of military high-precision inertial navigation system and vibration isolation test of precision instruments and equipment in aerospace, aviation, ships, weapons and other fields