

## JB1 Quartz Accelerometer



JB1 Series quartz flexibility Accelerometer is a high accuracy Accelerometer with excellent long-term stability, Repeatability, start-up performance, environmental adaptability and reliability making it a cost-effective military inertial grade quartz flexible Accelerometer.

The Accelerometer output current and the force received are linear output, and the user can select the appropriate sampling resistor to achieve the highest accurate output. At the same time, the Temperature Sensor is built in, and the output current changes linearly with temperature. The user compensates the Deviation value and Scale factor to reduce the temperature effect (optional). The product can be used for both static and dynamic testing and is a standard vibration sensor.

Applications: Inertial measurement and precision instrumentation for military high accuracy inertial navigation systems in aerospace, aerospace, marine, and weapons

No.	Parameter	JB1-01	JB1-02
1	measuring range	±50g	±50g
2	Threshold value	5μg	5μg
3	Deviation value k0/k1	≤(±3 mg)	≤(±5 mg)
4	Scale factor k1	1.3±0.2 mA/g	1.3±0.2 mA/g
5	Second-order nonlinear coefficient K2	≤±20μg /g <sup>2</sup>	≤±30μg /g <sup>2</sup>
6	0g 4 h short-term stability	≤10 μg	≤20 μg
7	1g 4 h short-term stability	≤10 ppm	≤20 ppm
8	Deviation value Comprehensive repeatability σk0 (1σ, 1 month)	≤10 μg	≤30 μg
9	Scale factor Comprehensive repeatability σk1/k1 (1σ, 1 month)	≤15ppm	≤30 ppm
10	Nonlinear coefficient Comprehensive repeatability σk2/k1(1σ, 1 month)	≤±10 μg /g <sup>2</sup>	≤±20 μg /g <sup>2</sup>
11	Deviation value Temperature Coefficient	≤±20 μg /°C	≤±30 μg /°C
12	Scale factor Temperature Coefficient	≤±20 ppm /°C	≤±30ppm /°C
13	noise(Sampling resistance is 840Ω)	≤5mv	≤8.4mv
14	Natural frequency	400~800 Hz	400~800 Hz
15	bandwidth	800~2500 Hz	800~2500 Hz
16	vibration	5g(20-2000Hz)	5g(20-2000Hz)
17	Shock	100g,5ms,1/2sin	100g,5ms,1/2sin
18	Operating temperaturemeasuring range	-40~+85°C	-40~+85°C
19	storage temperaturemeasuring range	-60~+120°C	-60~+120°C
20	power supply	±12~±15V	±12~±15V
21	Current consumption	≤±20mA	≤±20mA
22	Tempe Sensor	Yes and No two type	Yes and No two type
23	size	Φ25.4X30mm	Φ25.4X30mm
24	weight	≤80g	≤80g