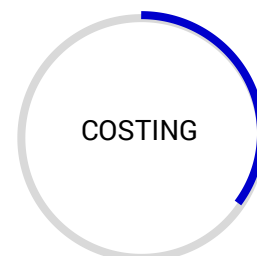
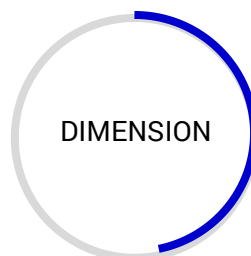
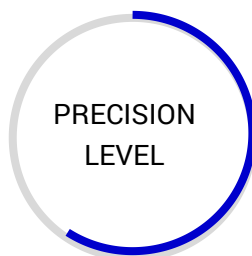




SNQ3 QUARTZ FLEXIBLE ACCELEROMETER

SINGLE AXIS | ANALOG OUTPUT

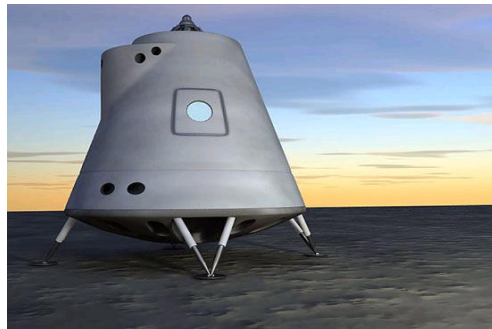


SNQ3 tactical grade quartz accelerometer with small dimension and high accuracy, long-term repeatability and excellent reliability. It is the cost-effective tactical accelerometer and widely used by global customers.

Its output current and force are linearly outputted. Users can calculate, select the appropriate sampling resistance, and achieve the highest precision output. At the same time, the temperature sensor is built in, users can compensate Bias and Scale factor, reduce the effect of temperature.

Application field:

It is mainly used in inertial navigation systems, in the fields of aviation, aerospace, ships, military, etc. It can be used for both static and dynamic testing, also it is a standard vibration sensor.



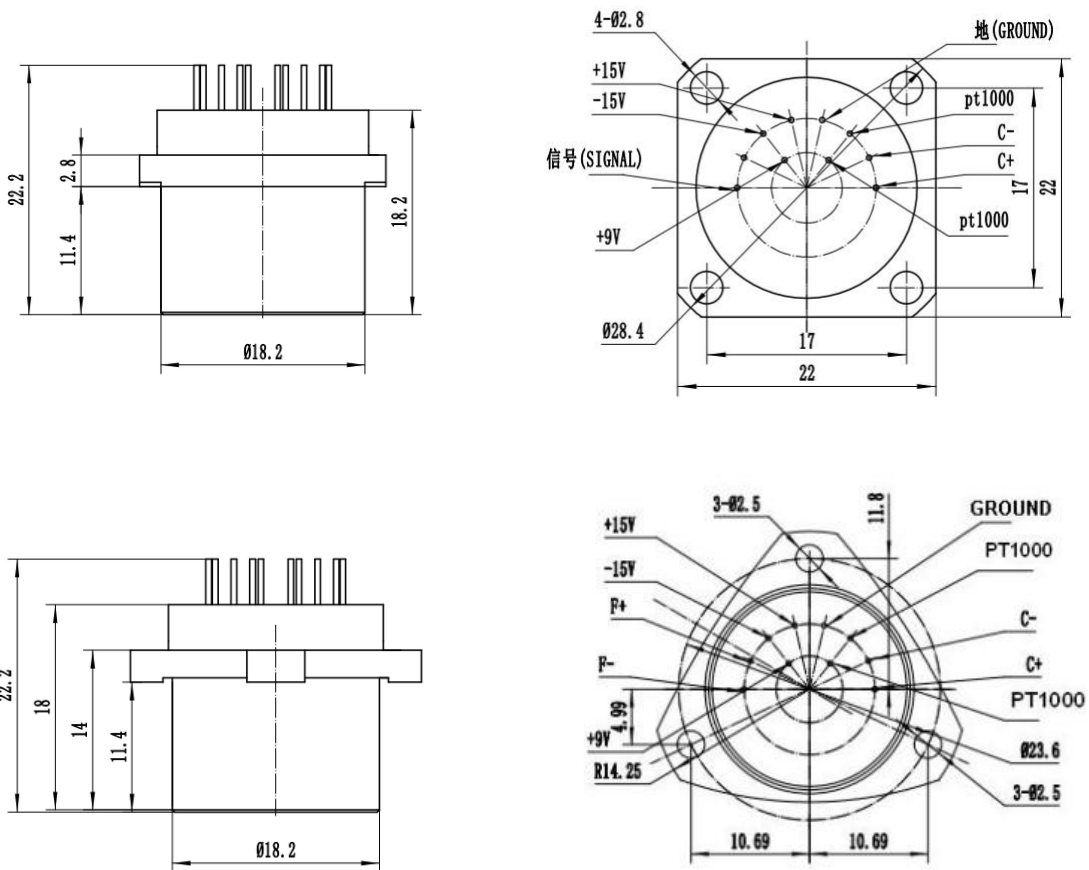
Features:

- Small dimension design
- Excellent starting repeatability
- Good environmental performance
- Analog output
- Adjustable output range
- Built-in temperature sensor, output current linearly transformed with temperature (optional)

1. Specifications:

No.	Parameters	SNQ3-01	SNQ3-02	SNQ3-03	SNQ3-04	SNQ3-05
1	Range(g)	±60			±30	±50
2	Threshold /Resolution(μg)	10			20	20
3	Bias k0/k1(mg)	≤±5	≤±10	≤±10	≤±7	≤±5
4	Scale factor k1(mA/g)	1.2±0.2		0.5~0.7	1.0~1.3	0.7~1.15
5	Class II nonlinearity Coefficient k2/k1(μg /g ²)	≤±20	≤±30	≤±20	≤±20	≤±20
6	0g 4 hours short time stability(μg)	≤10	≤30	≤20	-	-
7	1g 4 hours short time stability(ppm)	≤10	≤30	≤20	-	-
8	Bias drift repeatability σ k0(1σ, one month)(μg)	≤30	≤50	≤40	≤50	≤30
9	Scale factor repeatability σ k1/k1(1σ, one month)(ppm)	≤50	≤80	≤50	≤50	≤30
10	Class II nonlinearity Coefficient repeatability σ k2/k1(1σ, one month)(μg /g ²)	≤±20	≤±30	≤±20	≤±25	≤±15
11	Bias thermal coefficient(μg /°C)	≤±30	≤±50	≤±30	≤±50	≤±40
12	Scale factor thermal coefficient(ppm/°C)	≤±50	≤±80	≤±50	≤±60	≤±50
13	Noise (sample resistance 840Ω)(mv)	≤4	≤8.4	≤4	≤8.4	≤8.4
14	Natural Frequency(Hz)	350~800			≥400	
15	Bandwidth(Hz)	800~2500			≥800	
16	Vibration	10g(20~2000Hz)			10g(20~2000Hz)	
17	Shock	150g,0.5ms,1/2sin			100g,11ms,1/2sin	
18	Operating temperature range (°C)	-40~+85			-45~+80	
19	Storage temperature range (°C)	-60~+120			-55~+95	
20	Voltage(V)	±12~±15			±12~±15	
21	Consume current(mA)	≤±20			±20	
22	Temperature sensor	Yes or No			Yes or No	
		2			2	
23	Size(mm)	Φ18.2X23			Φ18.2X23	
24	Weight(gram)	≤30			≤30	

2. Dimension and Pin definition:



Square flange:

1. Signal output
2. Torque +
3. -15V DC Power Supply input
4. +15V DC Power Supply input
5. GND
6. PT1000 temperature sensor
7. Capacitance -
8. Capacitance +
9. PT1000 temperature sensor
10. +9v

Triangle flange:

1. F - (Signal output)
2. F +
3. -15V DC Power Supply input
4. +15V DC Power Supply input
5. GND
6. PT1000 temperature sensor
7. Capacitance -
8. Capacitance +
9. PT1000 temperature sensor
10. +9v