

ER-QA-03A high precision accelerometer, with high reliability, was mainly used in the inertial measurement and test system in the aerospace, aviation field. It can be used for static testing, and also dynamical testing, that's a standard vibration sensor.



Features:

1. Excellent turn-on repeatability performance
2. Environmentally rugged
3. Analog output
4. Field adjustable range
5. Internal temperature sensor for thermal compensation(option)

Specifications:

S/No	Parameters	ER-QA-03A A	ER-QA-03A B	ER-QA-03A C	Unit
1	Range	±50	±50	±50	g
2	Threshold /Resolution	5	5	5	μg
3	Bias k0/k1	≤(±3)	≤(±5)	≤(±7)	mg
4	Scale factor kl	1.3±0.2	1.3±0.2	1.3±0.2	mA/g
5	Class II nonlinearity coefficient k2/k1	≤(±20)	≤(±30)	≤(±30)	μg /g ²
6	0g 4 hours short time stability	≤10	≤20	≤30	μg

7	1g 4 hours short time stability	≤ 10	≤ 20	≤ 30	ppm
8	Bias drift Sigma k0(1 σ , one month)	≤ 10	≤ 30	≤ 50	μg
9	Repeatability of scale factor Sigma k1/k1(1 σ , one month)	≤ 15	≤ 30	≤ 50	ppm
10	Class II nonlinearity Coefficient repeatability k2/k1(1 σ ,one month)	$\leq(\pm 10)$	$\leq(\pm 20)$	$\leq(\pm 30)$	$\mu\text{g}/\text{g}^2$
11	Bias thermal coefficient	$\leq(\pm 10)$	$\leq(\pm 30)$	$\leq(\pm 50)$	$\mu\text{g}/^\circ\text{C}$
12	Scale factor thermal coefficient	$\leq(\pm 20)$	$\leq(\pm 30)$	$\leq(\pm 50)$	ppm / $^\circ\text{C}$
13	Noise (sample resistance 840 Ω)	≤ 5	≤ 8.4	≤ 8.4	mv
14	Natural Frequency	400~800	400~800	400~800	Hz
15	Bandwidth	800~2500	800~2500	800~2500	Hz
16	Vibration	6g(20-2000Hz)			g
17	Shock	100g,5ms,1/2sin			
18	Temperature range(Operating)	-40+85	-40+85	-40+85	$^\circ\text{C}$
19	Temperature range(saved)	-60+120	-60+120	-60+120	$^\circ\text{C}$
20	Power	$\pm 12\sim\pm 15$	$\pm 12\sim\pm 15$	$\pm 12\sim\pm 15$	V
21	Consume current	$\leq(\pm 20)$	$\leq(\pm 20)$	$\leq(\pm 20)$	mA
22	Temp. sensor	Yes and No two type			

23	Size	Φ25.4X30	Φ25.4X30	Φ25.4X30	mm
24	Weight	≤80	≤80	≤80	garm

Install dimension:

