

BS-AL1 series

								Unit
	BS-AL1-02-D1CS	BS-AL1-05-D1CS	BS-AL1-10-D1CS	BS-AL1-15-D1CS	BS-AL1-20-D1CS	BS-AL1-30-D1CS	BS-AL1-50-D1CS	
Measurement axis	X (parallel to the device surface) (to all models)							
Dynamic range	±2	±5	±10	±15	±20	±30	±50	g
Bandwidth (adjustable)	>120	>120	>120	>120	>120	>120	>120	Hz
Bias stability (1s, 1σ)	<20	<20	<50	<50	<50	<100	<200	μg
Monthly repeatability	<100	<100	<300	<300	<300	<300	<300	μg
Zero bias temperature coefficient	<10	<10	<30	<30	<30	<50	<100	μg/°C
Zero bias temperature hysteresis	2	2	3	3	3	4	4	mg
scale nonlinearity	1000	1000	2000	2000	2000	3000	3000	ppm
Monthly repeatability	<100	<100	<100	<100	<100	<100	<100	ppm
Scaling temperature coefficient	<5	<5	<5	<10	<10	<10	<10	ppm/°C
标度	3750000±37500	1500000±15000	700000±7000	500000±5000	350000±3500	250000±2500	150000±1500	LSB/g
Start Time	<1	<1	<1	<1	<1	<1	<1	s
Sampling frequency	25K	25K	25K	25K	25K	25K	25K	Hz
impact	The anti-overload model has passed the user's 27000g overload test							g
Vibration error (6grms)	/	/	<0.15	<0.15	<0.15	<0.15	<0.15	mg/grms
Operating temperature	-55~125	-55~125	-55~125	-55~125	-55~125	-55~125	-55~125	°C
Voltage	5.0±0.2	5.0±0.2	5.0±0.2	5.0±0.2	5.0±0.2	5.0±0.2	5.0±0.2	V
Rated current	11	11	11	11	11	11	11	mA
Interface	SPI	SPI	SPI	SPI	SPI	SPI	SPI	
Output signal	模拟/数字可选	模拟/数字可选	模拟/数字可选	模拟/数字可选	模拟/数字可选	模拟/数字可选	模拟/数字可选	

1. Description of long-term repeatability: 32 accelerometers with a ±50g range have been tested for long-term repeatability. There are 1.5 years of test data. 31% have zero-bias repeatability <0.2mg and zero-bias repeatability <0.5mg. The proportion of zero bias repeatability is 75%, the proportion of zero bias repeatability is less than 1.2 mg, the proportion of scale factor repeatability is less than 100ppm, 93.7%, and the proportion of scale factor repeatability is less than 200ppm, 100%.

2. The smaller the measuring range, the higher the accuracy. For example, the best zero-bias stability index of ±2g measuring range products is 3μg, and the long-term repeatability index is also better.

