

Model Number  
**SEN020**

# TRIAxIAL ICP® ACCELEROMETER

Revision: F

## Performance

	ENGLISH	SI	Notes
Voltage Sensitivity (± 20 %)	1 mV/g	0.1 mV/(m/s <sup>2</sup> )	
Measurement Range	±1500 g pk	±14715 m/s <sup>2</sup> pk	
Frequency Range (-5 %) (y or z axis)	0.5 to 2500 Hz	0.5 to 2500 Hz	[2]
Frequency Range (-5 %) (x axis)	0.5 to 3000 Hz	0.5 to 3000 Hz	[2]
Resonant Frequency	≥ 25 kHz	≥ 25 kHz	
Broadband Resolution (1 to 10000 Hz)	0.005 g rms	0.05 m/s <sup>2</sup> rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[3]
Transverse Sensitivity	≤ 5 %	≤ 5 %	

## Environmental

Overload Limit (Shock)	± 7000 g pk	± 68600 m/s <sup>2</sup> pk	
Temperature Range (Operating)	-65 to +250 °F	-54 to +121 °C	
Base Strain Sensitivity	0.001 g/με	0.01 (m/s <sup>2</sup> )/με	[1]

## Electrical

Excitation Voltage	20 to 30 VDC	20 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 100 Ohms	≤ 100 Ohms	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Discharge Time Constant	1.0 to 2.5 s	1.0 to 2.5 s	
Settling Time (within 10 % of bias)	< 10 s	< 10 s	
Spectral Noise (1 Hz)	700 μg/√Hz	6867 (μm/s <sup>2</sup> )/√Hz	[1]
Spectral Noise (10 Hz)	250 μg/√Hz	2453 (μm/s <sup>2</sup> )/√Hz	[1]
Spectral Noise (100 Hz)	170 μg/√Hz	1668 (μm/s <sup>2</sup> )/√Hz	[1]
Spectral Noise (1 kHz)	50 μg/√Hz	491 (μm/s <sup>2</sup> )/√Hz	[1]

## Physical

Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Height x Length x Width)	0.55 x 0.80 x 0.55 in	14.0 x 20.3 x 14.0 mm	
Weight	0.37 oz	10.5 gm	[1]
Electrical Connector	¼-28 4-Pin	¼-28 4-Pin	
Electrical Connector Position	Side	Side	
Mounting Thread	10-32 Female	10-32 Female	

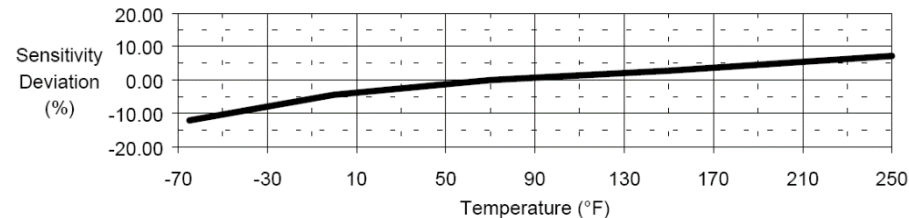


## Notes

- [1] Typical
- [2] Upper frequency response is ±500 Hz from the specified value
- [3] Zero-based, least-square, straight line method

## Supplied Accessories

- NIST Traceable Calibration Certificate
- 081B05 Mounting Stud (10-32 to 10-32) (1)



All specifications are at room temperature unless otherwise specified  
 In the interest of constant product improvement, we reserve the right to change specifications without notice.  
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 **LARSON DAVIS**  
 A PCB PIEZOTRONICS DIV.



**GMGA MEASURING**

**Address: No. 33 Alley 99/120 Dinh Cong Ha, Dinh Cong Ward, Hoang Mai District, 10000**

**Hanoi City, Vietnam**

**Telephone: [+84 845 969 336](tel:+84845969336)**

**Email: [info@gmga.vn](mailto:info@gmga.vn)**

**Website: <https://gmga.vn/>**