

Model Number
3711B12200G

DC RESPONSE ACCELEROMETER

Revision B
ECN #: 33944

Performance

	ENGLISH	SI	
Sensitivity ($\pm 10\%$)	10 mV/g	1.02 mV/(m/s ²)	
Measurement Range	± 200 g pk	± 1960 m/s ² pk	
Frequency Range ($\pm 5\%$)	0 to 850 Hz	0 to 850 Hz	
Frequency Range ($\pm 10\%$)	0 to 1250 Hz	0 to 1250 Hz	
Resonant Frequency	≥ 11 kHz	≥ 11 kHz	
Phase Response (100 Hz)	$< 10^\circ$	$< 10^\circ$	
Broadband Resolution (0.5 to 100 Hz)	21.1 mg rms	.21 m/s ² rms	[2]
Non-Linearity	$\leq 1\%$	$\leq 1\%$	[5]
Transverse Sensitivity	$\leq 3\%$	$\leq 3\%$	

Environmental

	ENGLISH	SI	
Overload Limit (Shock)	± 3000 g pk	± 29420 m/s ² pk	
Temperature Range (Operating)	-65 to +250 °F	-54.0 to +121 °C	
Temperature Range (Storage)	-65 to +250 °F	-54.0 to +121 °C	
Temperature Coefficient of Sensitivity	$\pm 3\%$	$\pm 3\%$	[3]
Zero g Offset Temperature Coefficient	$\pm 2\%$ FSO	$\pm 2\%$ FSO	[4][3]
Base Strain Sensitivity	.0005 g/ $\mu\epsilon$.005 (m/s ²)/ $\mu\epsilon$	[2]
Magnetic Sensitivity	70 $\mu\text{g/gauss}$	6.9 (m/s ²)/Tesla	[2]

Electrical

	ENGLISH	SI	
Excitation Voltage	6 to 30 VDC	6 to 30 VDC	
Current Consumption	≤ 5 mA	≤ 5 mA	
Output Impedance	≤ 100 ohm	≤ 100 ohm	
Offset Voltage (0 g)	± 40 mVDC	± 40 mVDC	[1]
Spectral Noise (1 to 100 Hz)	2518 $\mu\text{g}/\sqrt{\text{Hz}}$	24693 ($\mu\text{m}/\text{sec}^2$)/ $\sqrt{\text{Hz}}$	[2]
Electrical Isolation (Case)	$> 10^8$ ohm	$> 10^8$ ohm	

Physical

	ENGLISH	SI
Housing Material	Titanium	Titanium
Sealing	Hermetic	Hermetic
Size (Height x Length x Width)	0.45 in x 0.85 in x 0.85 in	11.4 mm x 21.6 mm x 21.6 mm
Weight (with cable)	2.29 oz	65.0 gm
Electrical Connector	Integral Cable	Integral Cable
Electrical Connection Position	Side	Side
Cable Termination	Pigtail Ends	Pigtail Ends
Cable Type	010 4-cond Shielded	010 4-cond Shielded
Cable Length	10 ft	3.05 m
Mounting	Through Hole	Through Hole

Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)

Notes

- [1] Offset tolerance is based on 10 ft of 010 test cable.
- [2] Typical.
- [3] -65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C)
- [4] FSO = Full Scale Output over the Measurement Range (4VDC).
- [5] Zero-based, least-squares, straight line method.
- [6] See PCB Declaration of Conformance PS027 for details.

Supplied Accessories

- 080A152 Easy Mount Clip (1)
- 081A113 Mounting screw assembly (2)
- ACS-103 Phase and Amplitude Calibration from 2 Hz to +5% of frequency range (1)
- M081A113 Mounting screw assembly (2)



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.

Entered: LLH	Engineer: MAM	Sales: WDC	Approved: RPF	Spec Number:
Date: 09/07/2010	Date: 09/02/2010	Date: 09/02/2010	Date: 09/07/2010	45110



3425 Walden Avenue
Depew, NY 14043
UNITED STATES
Phone: 888-684-0013
Fax: 716-685-3886
E-mail: vibration@pcb.com
Web site: www.pcb.com