

Model Number  
3743G1210G

# TRIAxIAL DC RESPONSE ACCELEROMETER

Revision: NR  
ECN #: 55341

Performance	ENGLISH	SI	
Sensitivity(± 3 %)	270 mV/g	27.5 mV/(m/s <sup>2</sup> )	[1]
Measurement Range	± 10 g pk	± 98.1 m/s <sup>2</sup> pk	
Frequency Range(± 5 %)	0 to 1,000 Hz	0 to 1,000 Hz	
Frequency Range(± 10 %)	0 to 1,500 Hz	0 to 1,500 Hz	
Resonant Frequency	3.2 kHz	3.2 kHz	[2]
Phase Response(100 Hz)	< 10 °	< 10 °	
Non-Linearity(Typical)	0.3 %	0.3 %	[3]
Non-Linearity(Max)	1 %	1 %	[3]
Broadband Resolution(0.5 to 100 Hz)	0.3 mg rms	0.003 m/s <sup>2</sup> rms	[2]
Transverse Sensitivity(Typical)	1 %	1 %	
Transverse Sensitivity(Max)	3 %	3 %	
<b>Environmental</b>			
Overload Limit(Shock)	± 5,000 g pk	± 49,050 m/s <sup>2</sup> 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	± 1 %	± 1 %	[4][2]
Zero g Offset Temperature Coefficient	± 1 % FSO	± 1 % FSO	[4][5][2]
Base Strain Sensitivity	.001 g/με	.01 (m/s <sup>2</sup> )/με	[2]
Magnetic Sensitivity	40 μg/gauss	3.9 (m/s <sup>2</sup> )/Tesla	[2]
<b>Electrical</b>			
Excitation Voltage	5 to 32 VDC	5 to 32 VDC	
Current Consumption	≤ 15 mA	≤ 15 mA	
Output Impedance	≤ 120 Ohm	≤ 120 Ohm	
Offset Voltage(0 g)	± 20 mVDC	± 20 mVDC	[6]
Common Mode Voltage(+/- 0.1 VDC)	1.65 VDC	1.65 VDC	
Spectral Noise(1 Hz)	30 μg/√Hz	294 (μm/s <sup>2</sup> )/√Hz	[2]
Spectral Noise(10 Hz)	30 μg/√Hz	294 (μm/s <sup>2</sup> )/√Hz	[2]
Spectral Noise(100 Hz)	30 μg/√Hz	294 (μm/s <sup>2</sup> )/√Hz	[2]
Electrical Isolation(Case)	> 10 <sup>8</sup> Ohm	> 10 <sup>8</sup> Ohm	
<b>Physical</b>			
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Hermetic	Hermetic	
Size (Length x Width x Height)	0.76 in x 1.03 in x 0.66 in	19.3 mm x 26.2 mm x 16.8 mm	
Weight	0.92 oz	26.1 gm	[2]
Accelerometer, Excluding Cable	0.30 oz/ft	27.6 gm/m	[2]
Electrical Connector	Integral Cable	Integral Cable	
Electrical Connection Position	Side	Side	
Cable Type	037 10-cond Shielded	037 10-cond Shielded	
Mounting Thread	Through Hole	Through Hole	

## OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

## NOTES:

- [1] Measured at 100 Hz, 1 grms.
- [2] Typical.
- [3] Zero-based, least-squares, straight line method.
- [4] -65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C)
- [5] FSO= Full Scale Output over the Measurement Range
- [6] Offset tolerance is based on 10ft of 528 test cable.
- [7] See PCB Declaration of Conformance PS027 for details.

## SUPPLIED ACCESSORIES:

Model 081A135 Mounting screw and washer, 4-40 x 7/8" thread (2)  
Model ACS-172T Triaxial Phase and Amplitude Calibration from 5 Hz to +5% frequency range (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.  
This model, designated with an RH prefix, is RoHS compliant. For further details, and to obtain PCB's RoHS Statement of Conformance, please visit <http://www.pcb.com>

Entered: ND	Engineer: JJD	Sales: JM	Approved: NJF	Spec Number:
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