

Model Number
3713D1FE3G

TRIAXIAL DC ACCELEROMETER

Revision: H
ECN #: 29264

	ENGLISH	SI	
Performance			
Sensitivity(± 5 %)	700 mV/g	71.4 mV/(m/s ²)	[6]
Measurement Range	± 3 g pk	± 29 m/s ² pk	
Frequency Range(± 5 %)	0 to 100 Hz	0 to 100 Hz	
Frequency Range(± 10 %)	0 to 150 Hz	0 to 150 Hz	
Resonant Frequency	>600 Hz	>600 Hz	[7]
Phase Response(10 Hz)	<2.5 °	<2.5 °	
Damping Ratio(± 0.25)	0.85	0.85	[3]
Broadband Resolution(0.5 to 100 Hz)	1.10 mg rms	0.011 m/s ² rms	[3]
Non-Linearity	≤ 1 %	≤ 1 %	[8]
Transverse Sensitivity	≤ 3 %	≤ 3 %	[3]
Environmental			
Overload Limit(Shock)	± 5000 g pk	± 49,033 m/s ² pk	
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C	
Temperature Range(Storage)	-65 to +250 °F	-54 to +121 °C	
Temperature Coefficient of Sensitivity	± 3 %	± 3 %	[4]
Zero g Offset Temperature Coefficient	± 2 %FSO	± 2 %FSO	[4][5]
Base Strain Sensitivity	0.0002 g/με	0.002 (m/s ²)/με	[3]
Magnetic Sensitivity	10 equiv. μg/gauss	0.98 (m/s ²)/Tesla	[3]
Electrical			
Excitation Voltage	5 to 30 VDC	5 to 30 VDC	
Current Consumption	≤ 30 mA	≤ 30 mA	
Output Impedance	≤ 100 ohm	≤ 100 ohm	
Offset Voltage(0 g)	± 40 mVDC	± 40 mVDC	[1][2]
Spectral Noise(1 to 100 Hz)	110 μg/√Hz	1079 (μm/s ²)/√Hz	[3]
Electrical Isolation(Case)	>10 ⁸ ohm	>10 ⁸ ohm	
Physical			
Housing Material	Titanium	Titanium	
Sealing	Epoxy	Epoxy	
Size (Length x Width x Height)	1.1 in x 1.1 in x 1.1 in	28 mm x 28 mm x 28 mm	
Weight(with cable)	5.9 oz	168.7 gm	
Electrical Connector	Integral Cable	Integral Cable	
Electrical Connection Position	Side	Side	
Cable Type	037 10-cond Shielded	037 10-cond Shielded	
Cable Length	10 ft	3.05 m	
Mounting Thread	10-32 Female	10-32 Female	

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] Offset tolerance is based on 10 ft of 037 test cable.
- [2] Actual offset is called out on Cal Cert.
- [3] Typical.
- [4] -65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C)
- [5] FSO = Full Scale Output over the Measurement Range (4VDC).
- [6] Measured at 5 Hz, 1 grms.
- [7] Measured at 90° phase shift.
- [8] Zero-based, least-squares, straight line method.
- [9] See PCB Declaration of Conformance PS027 for details.

SUPPLIED ACCESSORIES:

- Model 080A190 Adhesive Mounting Base (1)
- Model 081A05 Mounting stud, 10-32 to 10-32 x 0.27" long, BeCu (H900), no shoulder
- Model ACS-85T Triaxial Phase and Magnitude Calibration form 0.5 Hz to 5% pt on linear scale (1)
- Model M081A05 Mounting Stud 10-32 to M6 x 0.75 x 0.27" long BeCu (H900), no shoulder (1)

Entered: <i>BLS</i>	Engineer: <i>TCS</i>	Sales: <i>RSL</i>	Approved: <i>BM</i>	Spec Number:
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[9]

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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