

MODEL NUMBER 7531A3	PERFORMANCE SPECIFICATIONS	DOC NO. PS7531A3
	SINGLE AXIS, DC ACCELEROMETER	REV B ECN 12745, 06/08/16



- **LOW COST**
- **WIDE SUPPLY VOLTAGE RANGE**
- **LOW CURRENT CONSUMPTION**

	ENGLISH		SI	
PHYSICAL				
Weight, Max. (less cable)	0.21	oz	6.0	grams
Mounting	2X M2 Screws		2X M2 Screws	
Cable	6-conductor	Type	6-conductor	
	Santoprene	Material	Santoprene	
Housing	Aluminum, Anodized	Material	Aluminum, Anodized	
	Case Isolated	Isolation	Case Isolated	
PERFORMANCE				
Sensitivity, +/-10% [1]	174	mV/g	17.7	mV/m/s ²
Acceleration Range	±5	Gpeak	±49.1	m/s ² peak
Frequency Range, -3dB	0 to 1600	Hz	0 to 1600	Hz
Resonance Frequency	>5.5	kHz	>5.5	kHz
Linearity [2]	± 0.21	%F.S.	± 0.21	%F.S.
Transverse Sensitivity Max	5	%	5	%
Spectral Noise	250	µGrms/√Hz	2453	µm/s ² rms/√Hz
Sensitivity Change Due to Temperature	±0.006	%/°F	±0.01	%/°C
ELECTRICAL				
Supply Current	350	µA	350	µA
Supply Voltage Range	4 to 28	VDC	4 to 28	VDC
Output Impedance, Typ.	100	Ω	100	Ω
Output Bias Voltage	1.3 to 1.7	VDC	1.3 to 1.7	VDC
Output Range	±0.975	VDC	±0.975	VDC
Self-Test Output [3]	-90 to -350	mV	-90 to -350	mV
Turn-On Time	1	ms	1	ms
ENVIRONMENTAL				
Shock Max	10,000	g pk	98100	m/s ²
Vibration Max	5000	g pk	49050	m/s ²
Operating Temperature	-40 to +185	°F	-40 to +85	°C
Seal	Epoxy		Epoxy	

Model	Sensitivity (mV/g)	Range (Gpeak)	Noise(µGrms/sqr(Hz))	Oper. Temp(°F)
7531A1	420	±2	250	-40 to 185
7531A2	300	±3	175	-40 to 185
7531A4	57	±16	300	-40 to 185
7531A5	6.5	±200	2700	-40 to 185

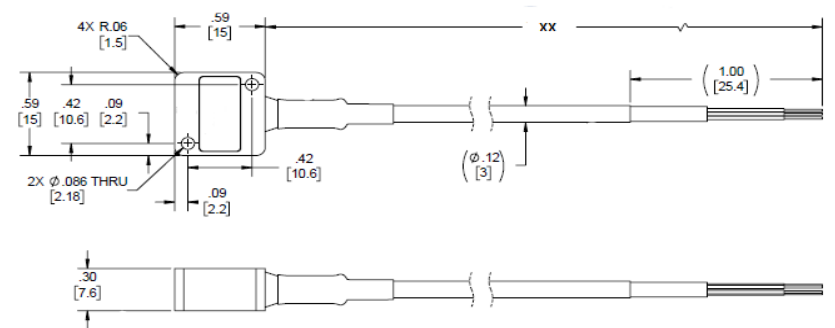
Please, refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting Screw, Model 6675, M2x0.4 x 12mm, qty. 2

Notes:

- [1] Measured at 100 Hz, 5 Grms per ISA RP 37.2
- [2] Linearity is % of specified full scale (or any less full-scale range), zero-based best fit straight line method.
- [3] Refer to the Operating Guide for instructions on how to use Self-Test feature



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-7531A1-XX for more information.



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax:818.700.7880
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