

Model Number 670A01		ECHO® WIRELESS VIBRATION SENSOR		Revision: D ECN #: 47051	
Performance		ENGLISH		SI	
RMS Velocity Frequency Range(± 3 dB)	4 to 2300 Hz	4 to 2300 Hz	[2]	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. CS - Canadian Standards Association Approved Intrinsically Safe [6] M - Metric Mount Supplied Accessory : Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1)	
Velocity HP Filter	2 Hz, 1-pole RC	2 Hz, 1-pole RC			
Velocity LP Filter	2400 Hz,3-pole Chebyshev	2400 Hz,3-pole Chebyshev			
Velocity Resolution	0.001 ips rms	0.025 mm/s rms			
Velocity Range	4 ips rms	101.6 mm/s rms			
RMS Acceleration Frequency Range(± 3 dB)	2.2 to 15 kHz	2.2 to 15 kHz	[2]		
Acceleration HP Filter	2000 Hz,4-pole Chebyshev	2000 Hz,4-pole Chebyshev			
Acceleration LP Filter	15k Hz, 3-pole Chebyshev + 1-pole RC	15k Hz, 3-pole Chebyshev + 1-pole RC			
Acceleration Resolution	0.007 g pk	0.069 m/s² pk	[3]		
Acceleration Range	20 g pk	196.2 m/s² pk	[3]		
Transverse Sensitivity	≤ 7 %	≤ 7 %			
Velocity Linearity(0-1 ips rms)	<1 %	<1 %	[4]		
Velocity Linearity(0-4 ips rms)	<8.5 %	<8.5 %	[4]		
Acceleration Linearity	<1 %	<1 %	[4]		
Environmental				NOTES: [1] Typical. [2] Upper frequency tolerance is ± 10% of the specified value. [3] Conversion Factor 1g = 9.81 m/s². [4] Zero-based, least-squares, straight line method. [5] 1/4-28 has no equivalent in S.I. units. [6] CL 1, Div 2, Groups A, B, C, D, T5	
Overload Limit(shock)	1000 g pk	9810 m/s² pk			
Temperature Range	-4 to +158 °F	-20 to +70 °C			
Enclosure Rating	IP66	IP66			
Transmission Range	250 ft to >1 mile radius, installation dependent	250 ft to >1 mile radius, installation dependent	[1]		
Electrical					
RMS Velocity	Analog Integration, FFT Sum	Analog Integration, FFT Sum			
RMS Acceleration	3.7 Sec time sample @ 61.4 kHz sample rate	3.7 Sec time sample @ 61.4 kHz sample rate			
Filtered Crest Factor(max)	16	16			
Frequency Band	900 MHz ISM Band	900 MHz ISM Band			
Number of RF Bands	12	12			
Maximum Power(ERP)	0.75 mW	0.75 mW			
RF Data Rate	20 bps	20 bps			
ADC/dynamic range	16 bit/>90db	16 bit/>90db			
Battery Life(room temperature)	>5 years @ 3-measurements per day	>5 years @ 3-measurements per day			
Electrical Isolation	>10 ⁸ Ohm	>10 ⁸ Ohm			
Physical					
Power	7.2V Lithium Battery Pack	7.2V Lithium Battery Pack			
Size (Hex x Height)	1.375 in x 4.40 in	34.93 mm x 111.8 mm			
Sensing Element	Ceramic	Ceramic			
Weight	1 lb	454 g			
Sensing Geometry	Shear	Shear			
Housing Material	Stainless Steel	Stainless Steel			
Housing Diameter	1.66 in	42.0 mm			
Mounting	1/4" - 28	1/4" - 28	[5]	SUPPLIED ACCESSORIES: Model 081A40 Mounting Stud (1)	
Mounting Torque	3 to 5 ft-lb	4 to 7 Nm			
Sealing	O-Ring	O-Ring			
Sensor Activation/Deactivation	Magnet Switch	Magnet Switch			
					
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.				 IMI SENSORS A PCB PIEZOTRONICS DIV. 3425 Walden Avenue, Depew, NY 14043	
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