Model Number		ECHO@	WIDEL EGG VIII	RP		
670A01		ECHO® WIRELESS VIBR				
Performance		<u>ENGLISH</u>	<u>SI</u>			
RMS Velocity Frequency Range(± 3 dB)		4 to 2300 Hz	4 to 2300 Hz	[2]		
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 rn				
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-	15k Hz, 3-pole Chebyshev + 1-			
		pole RC	pole RC			
Acceleration Resolution		0.007 g pk	0.069 m/s ² 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						
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,	250 ft to>1 mile radius,	[1]		
		installation dependent	installation dependent			
Electrical						
RMS Velocity		Analog Integration, FFT Sum	Analog Integration, FFT Sum			
RMS Acceleration		3.7 Sec time sample @ 61.4	3.7 Sec time sample @ 61.4			
		kHz sample rate	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	>5 years @ 3-measurements			
		per day	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				
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			
Mounting Torque		3 to 5 ft-lb	4 to 7 Nm			
Sealing		O-Ring	O-Ring			
Sensor Activation/Deact	ivation	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. ICP® is a registered trademark of PCB Group, Inc.

RATION SENSOR

Revision: D ECN #: 47051

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)

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

SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud (1)

Entered: LK	Engineer: BAM	Sales: MC	Approved: BAM	Spec Number:
Date: 7/18/2017	Date: 7/18/2017	Date: 7/18/2017	Date: 7/18/2017	42657



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