

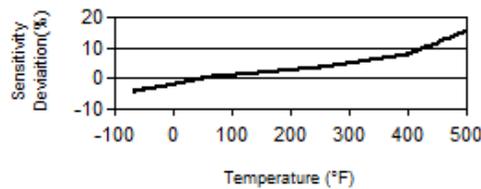
Model Number  
**EX615A42**

# HIGH TEMPERATURE INDUSTRIAL ACCELEROMETER

Revision: A  
ECN #: 47864

	<u>ENGLISH</u>	<u>SI</u>	
<b>Performance</b>			
Sensitivity(± 5 %)	100 pC/g	10.2 pC/(m/s <sup>2</sup> )	[2]
Measurement Range	+/-200 g pk	+/-2000 m/s <sup>2</sup> pk	
Frequency Range(± 5 %)	5 kHz	5 kHz	[3]
Frequency Range(± 10 %)	6 kHz	6 kHz	
Resonant Frequency	>20 kHz	>20 kHz	[1]
Non-Linearity(<200 g pk)	± 1 %	± 1 %	[4]
Transverse Sensitivity	<5 %	<5 %	[5]
<b>Environmental</b>			
Overload Limit(Shock)	1000 g pk	9800 m/s <sup>2</sup> pk	
Temperature Range	-65 to +500 °F	-54 to +260 °C	
Temperature Response	See Graph	See Graph	
Temperature Response	+ .03 %/°F	+ .06 %/°C	[1]
Temperature Response	See Graph	See Graph	
Base Strain Sensitivity	0.003 g/µε	0.03 (m/s <sup>2</sup> )/µε	[1]
Enclosure Rating	IP68	IP68	
<b>Electrical</b>			
Capacitance(Pin to Pin)	11,100 pF	11,100 pF	[1]
Capacitance(with integral cable)	35 pF/ft	115 pF/m	
Insulation Resistance(at 500F)	≥ 10 <sup>7</sup> Ohm	≥ 10 <sup>7</sup> Ohm	
Insulation Resistance(at room temp)	≥ 10 <sup>9</sup> Ohm	≥ 10 <sup>9</sup> Ohm	
Electrical Isolation(Case)	>10 <sup>8</sup> Ohm	>10 <sup>8</sup> Ohm	
<b>Physical</b>			
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Size (Height x Length x Width)	.89 in x 1.58 in x 1.58 in	23 mm x 40 mm x 40 mm	
Weight(without cable)	6.7 oz	190 gm	[1]
Mounting	Through Holes (4)	Through Holes (4)	
Cable Length	10 ft	3 m	
Cable Termination	Pigtail	Pigtail	
Cable Type	Armored 3-wire, low-noise PTFE cable	Armored 3-wire, low-noise PTFE cable	
Mounting Torque	11 ft-lb	15 Nm	

Typical Sensitivity Deviation vs Temperature



## 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] Typical.
- [2] Conversion Factor 1g = 9.81 m/s<sup>2</sup>.
- [3] 1Hz = 60 cpm (cycles per minute).
- [4] Zero-based, least-squares, straight line method.
- [5] Transverse sensitivity is typically ≤ 3%.

## SUPPLIED ACCESSORIES:

Model 081C108 Mounting Screw, 1/4-28x1, Inconel (4)  
Model ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency (3)

Entered: LK	Engineer: JR	Sales: MC	Approved: JJB	Spec Number:
Date: 2/14/2018	Date: 2/14/2018	Date: 2/14/2018	Date: 2/14/2018	<b>58202</b>



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.

**IMI SENSORS**  
A PCB PIEZOTRONICS DIV.  
3425 Walden Avenue, Depew, NY 14043

Phone: 800-959-4464  
Fax: 716-684-3823  
E-Mail: imi@pcb.com