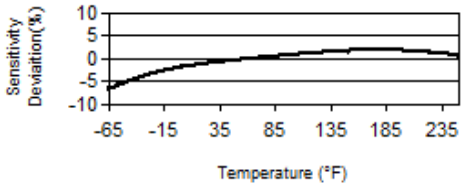
Model Number	PRECISION INDUSTRIAL ICP® ACCELEROMETER	Revision: A
622B11		ECN #: 49082

Performance	ENGLISH	SI	
Sensitivity(± 5 %)	100 mV/g	10.2 mV/(m/s²)	[2]
Measurement Range	± 50 g	± 490 m/s²	
Frequency Range(± 5 %)	35 to 360,000 cpm	0.58 to 6000 Hz	[3]
Frequency Range(± 10 %)	25 to 600,000 cpm	0.42 to 10,000 Hz	
Frequency Range(± 3 dB)	12 to 900,000 cpm	0.2 to 15,000 Hz	
Resonant Frequency	1800 kcpm	30 kHz	[1]
Broadband Resolution(1 to 10,000 Hz)	50 µg	490 µm/sec^2	[1]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	5000 g pk	49,050 m/s² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[1]
Enclosure Rating	IP68	IP68	
Electrical			
Settling Time(within 1% of bias)	≤ 5.0 sec	≤ 5.0 sec	
Discharge Time Constant	≥ 0.8 sec	≥ 0.8 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	<100 Ohm	<100 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	4.0 µg/√Hz	39.2 (µm/sec^2)/√Hz	[1]
Spectral Noise(100 Hz)	0.8 µg/√Hz	7.85 (µm/sec^2)/√Hz	[1]
Spectral Noise(1 kHz)	0.4 µg/√Hz	3.92 (µm/sec^2)/√Hz	[1]
Electrical Protection	RFI/ESD	RFI/ESD	
Electrical Isolation	>10^8 Ohm	>10^8 Ohm	
Physical			
Size (Hex x Height)	7/8 in x 2.06 in	22 mm x 52.3 mm	
Weight(without cable)	3.3 oz	94 gm	
Mounting Thread	1/4-28 Female	No Metric Equivalent	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 Nm	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Cable Length	10 ft	3 m	
Cable Type	Polyurethane	Polyurethane	[6]

Typical Sensitivity Deviation vs Temperature



CE [7]

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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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.

EX - Hazardous Area Approval- contact factory for specific approvals [8]

M - Metric Mount
Supplied Accessory : Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1)

TO - Temperature Output

Temperature Output Range	+36 to +250 °F	+2 to +121 °C
Temperature Scale Factor	5.56 mV/°F + 32	+10 mV/°C
Electrical Connections(Pin A)	Acceleration Output	Acceleration Output
Electrical Connections(Pin B)	Ground	Ground
Electrical Connections(Pin C)	Temperature Output	Temperature Output

NOTES:

[1] Typical.
[2] Conversion Factor 1g = 9.81 m/s².
[3] The high frequency tolerance is accurate within ±10% of the specified frequency.
[4] Zero-based, least-squares, straight line method.
[5] 1/4-28 has no equivalent in S.I. units.
[6] Twisted shielded pair.
[7] See PCB Declaration of Conformance PS023 or PS061 for details.
[8] EEx ia IIC T4.

SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud (1)
Model ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency (1)

Entered: LK	Engineer: gs	Sales: EGY	Approved: NJF	Spec Number:
Date: 2/4/2019	Date: 2/4/2019	Date: 2/4/2019	Date: 2/4/2019	37834

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