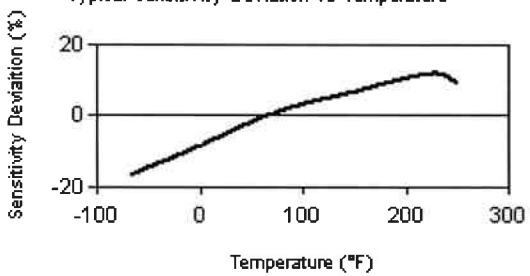
Model Number	INDUSTRIAL ICP® ACCELEROMETER	Revision: NR
603C05		ECN #:

Performance	ENGLISH	SI	
Sensitivity(± 20 %)	50 mV/g	5.1 mV/(m/s²)	[2]
Measurement Range	± 100 g	± 981 m/s²	
Frequency Range(± 3 dB)	72 to 600,000 cpm	1.2 to 10,000 Hz	[3]
Resonant Frequency	1500 kcpm	25 kHz	[1]
Broadband Resolution(1 to 10,000 Hz)	750 µg	7358 µm/s²	[1]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 7 %	≤ 7 %	
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)	≤ 2.0 sec	≤ 2.0 sec	
Discharge Time Constant	≥ 0.4 sec	≥ 0.4 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	<150 ohm	<150 ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise(10 Hz)	18 µg/√Hz	176 (µm/s²)/√Hz	[1]
Spectral Noise(100 Hz)	10 µg/√Hz	98.1 (µm/s²)/√Hz	[1]
Spectral Noise(1 kHz)	7 µg/√Hz	68.7 (µm/s²)/√Hz	[1]
Electrical Isolation(Case)	>10^8 ohm	>10^8 ohm	
Physical			
Size (Hex x Height)	11/16 in x 1.65 in	18 mm x 42.2 mm	
Weight	1.8 oz	51 gm	
Mounting Thread	1/4-28 Female	No Metric Equivalent	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 N-m	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	2-Pin MIL-C-5015	2-Pin MIL-C-5015	
Electrical Connection Position	Top	Top	

Typical Sensitivity Deviation vs Temperature



CE [6]

Ex

c SP us

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 - ATEX or ATEX and CSA Hazardous Area Approval

Hazardous Area Approval	EEx ia IIC T4, -40°C≤Ta≤121° C, II 1 G	EEx ia IIC T4, -40°C≤Ta≤121° C, II 1 G
Hazardous Area Approval	Cl I, Div I, Groups A, B, C, D; Cl II, Div I, Groups E, F, G; Cl III, Div I	Cl I, Div I, Groups A, B, C, D; Cl II, Div I, Groups E, F, G; Cl III, Div I
Hazardous Area Approval	Exia IIC T4, AExia IIC, T4	Exia IIC T4, AExia IIC, T4
Hazardous Area Approval	Cl I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4	Cl I, Div 2, Groups A, B, C, D; ExnL IIC T4, AExnA IIC T4
Hazardous Area Approval	EEx nL IIC T4, -40°C≤Ta≤ 121°C, II 3 G	EEx nL IIC T4, -40°C≤Ta≤ 121°C, II 3 G

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 Connector	3-Pin MIL-C-5015	3-Pin MIL-C-5015
Electrical Connections(Pin A)	Acceleration Output	Acceleration Output
Electrical Connections(Pin B)	Ground	Ground
Electrical Connections(Pin C)	Temperature Output	Temperature Output
Size - Height	1.86 in	47.2
Weight	2.0 oz	56.7

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] See PCB Declaration of Conformance PS023 or PS060 for details.

SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud
Model ICS-2 NIST-traceable single-axis single-point amplitude response calibration at 6000 cpm (100 Hz) (1)

Entered:	Engineer: MJN	Sales:	Approved:	Spec Number:
Date: 8-9-07	Date: 8/13/07	Date: 8/13/07	Date: 8/13/07	38270

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