

Model Number 646B01	4-20 MA OUTPUT ACCELEROMETER	Revision NR ECN #:
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Performance

	ENGLISH	SI	
Measurement Range	0.0 to 10 g rms	0.0 to 98.1 m/s ² rms	[1]
Output	4-20 mA	4-20 mA	
Frequency Range (±10 %)	180 to 300000 cpm	3 to 5 kHz	[2][3]
Broadband Resolution	0.05 g rms	0.49 m/s ² rms	[4]
Non-Linearity	±1 %	±1 %	

Environmental

Temperature Range	-40 to 185 °F	-40 to 85 °C
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Electrical

Excitation Voltage	12 to 30 VDC	12 to 30 VDC
Load Resistance	50(Vs-12) Ohm	50(Vs-12) Ohm
Settling Time (within 2% of value)	<15 sec	<15 sec
Electrical Isolation (Case)	>10 ⁸ Ohm	>10 ⁸ Ohm

Physical

Size (Hex x Height)	1.0 in x 2.6 in	25.4 mm x 66 mm
Weight	4.7 oz	131 gm
Mounting Thread	1/4-28 UNF	No Metric Equivalent
Mounting Torque	3 to 5 ft-lb	4 to 7 Nm
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
Electrical Connections (Pin A)	4-20 mA Pos (+)	4-20 mA Pos (+)
Electrical Connections (Pin B)	4-20 mA Neg (-)	4-20 mA Neg (-)



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 standard model except where noted below. More than one option maybe used.)

M - Metric Mount

Supplied Accessory: Model M081A61 Mounting stud, 1/4-28 to M6 x 1 replaces Model 081A40

RV - Buffered Analog Signal Output - 100 mV/g (±20%)

Electrical Connector	3-Pin MIL-C-5015	3-Pin MIL-C-5015
Electrical Connections (Pin A)	4-20 mA Pos (+)	4-20 mA Pos (+)
Electrical Connections (Pin B)	4-20 mA	4-20 mA
	Neg/Signal Output	Neg/Signal Output
	Neg	Neg
Electrical Connections (Pin C)	Signal Output Pos	Signal Output Pos

Notes

- [1] Conversion Factor 1g = 9.81 m/s².
- [2] 1Hz = 60 cpm (cycles per minute).
- [3] Current will fluctuate at frequencies below 5 Hz.
- [4] Typical.
- [5] See PCB Declaration of Conformance PS039 for details.

Supplied Accessories

081A40 Mounting Stud (1)
ICS-4 NIST-traceable single-axis amplitude response calibration from 0 cpm (0 Hz) to upper 10% frequency for 4 - 20 mA output vibration sensor (1)

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3425 Walden Avenue
Depew, NY 14043
UNITED STATES
Phone: 716-684-0003
Fax: 716-684-3823
E-mail: imi@pcb.com
Web site: www.imi-sensors.com