

Model Number
640B00

LOOP POWERED CURRENT OUTPUT SENSOR

Revision: NR
ECN #:

	ENGLISH	SI	
Performance			
Measurement Range	0.0 to 0.5 in/s pk	0.0 to 12.7 mm/s pk	[1]
Output	4-20 mA	4-20 mA	
Frequency Range ($\pm 10\%$)	180 to 60,000 cpm	3 Hz to 1 kHz	[2][3]
Broadband Resolution	0.005 in/s pk	0.13 mm/s pk	[4]
Non-Linearity	$\pm 1\%$	$\pm 1\%$	
Environmental			
Temperature Range	-40 to 185 °F	-40 to 85 °C	
Electrical			
Excitation Voltage	12 to 30 VDC	12 to 30 VDC	
Load Resistance	50 (V_s -12) ohms	50 (V_s -12) ohms	
Settling Time (within 2% of value)	<15 sec	<15 sec	
Electrical Isolation (Case)	>10 ⁸ ohms	>10 ⁸ ohms	
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	Not Applicable	
Mounting Torque	3 to 5 ft-lb	4 to 7 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	
Electrical Connections (Pin A)	4-20 mA Pos	4-20 mA Pos	
Electrical Connections (Pin B)	4-20 mA Neg	4-20 mA Neg	

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.

M - Metric Mount
Supplied Accessory : Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1) replaces Model 081A40

RV - Buffered Analog Signal Output - 100 mV/g ($\pm 20\%$)

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 Neg/Signal Output	4-20 mA Neg/Signal Output
	Neg	Neg
Electrical Connections (Pin C)	Signal Output Pos	Signal Output Pos

NOTES:

- [1] Conversion Factor 1 in/sec = 0.0254 m/sec.
- [2] Current will fluctuate at frequencies below 5 Hz.
- [3] 1Hz = 60 cpm (cycles per minute).
- [4] Typical.
- [5] See PCB Declaration of Conformance PS039 for details.

SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud (1)
Model 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)

Loop Powered Current Output Vibration Sensor

Entered: <i>JR</i>	Engineer: <i>MJE</i>	Sales: <i>DL</i>	Approved: <i>NR</i>	Spec Number:
Date: <i>8-6-04</i>	Date: <i>8/6/04</i>	Date: <i>8-6-04</i>	Date: <i>8/10/04</i>	27201



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