

PROPRIETARY AND CONFIDENTIAL

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REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	5091	INITIAL RELEASE	RLA 02/21/08	DV	ANS
B	10202	REVISED TO REFLECT NEW DESIGN	LN 07/24/13	<i>LN</i>	AS

D

D

C

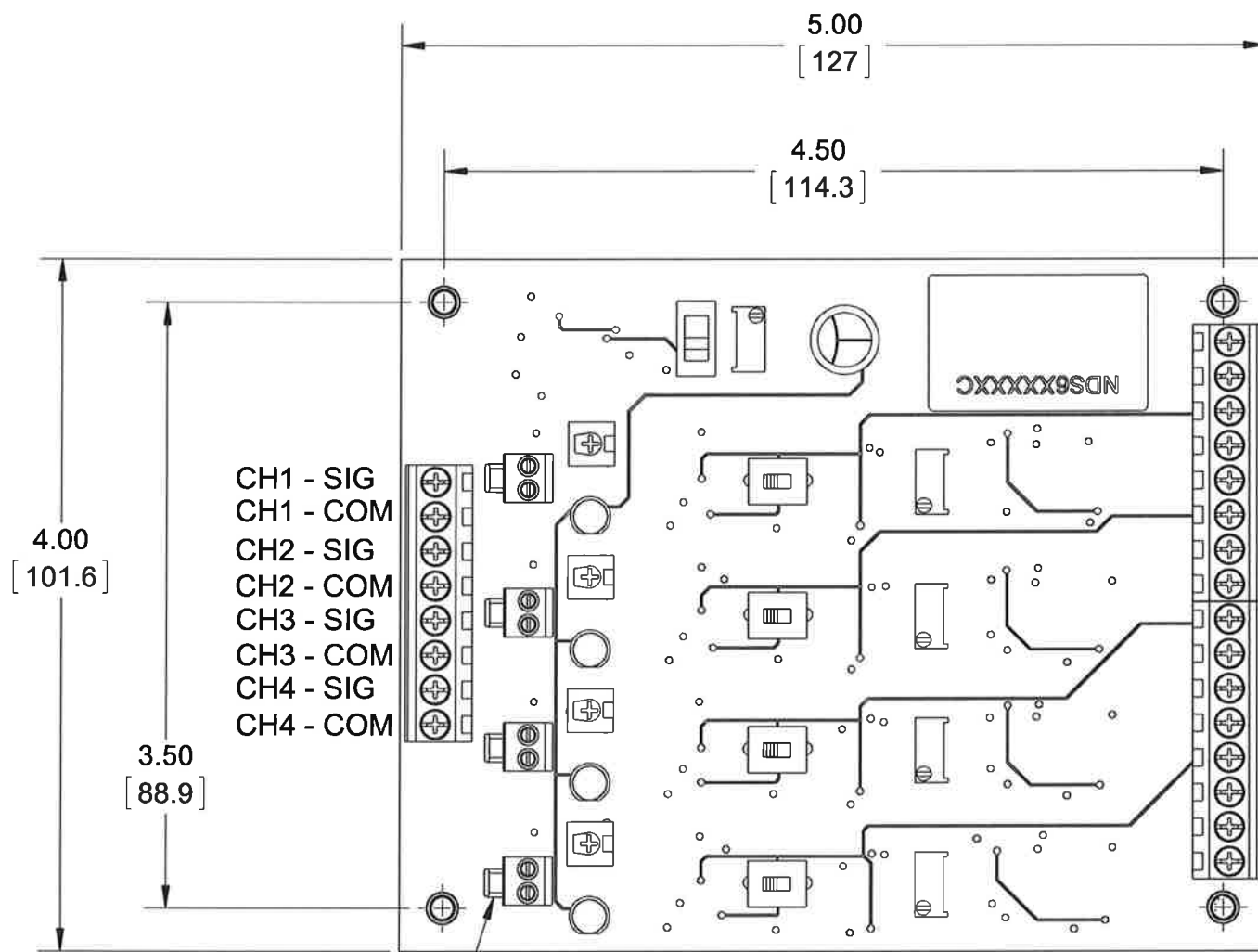
C

B

B

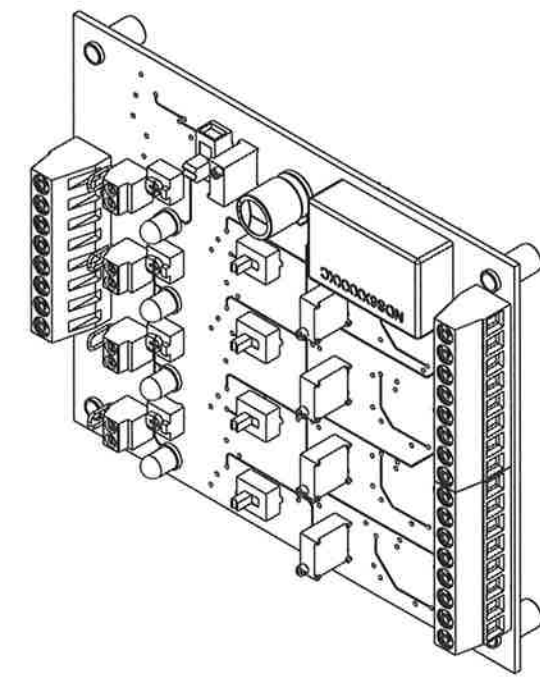
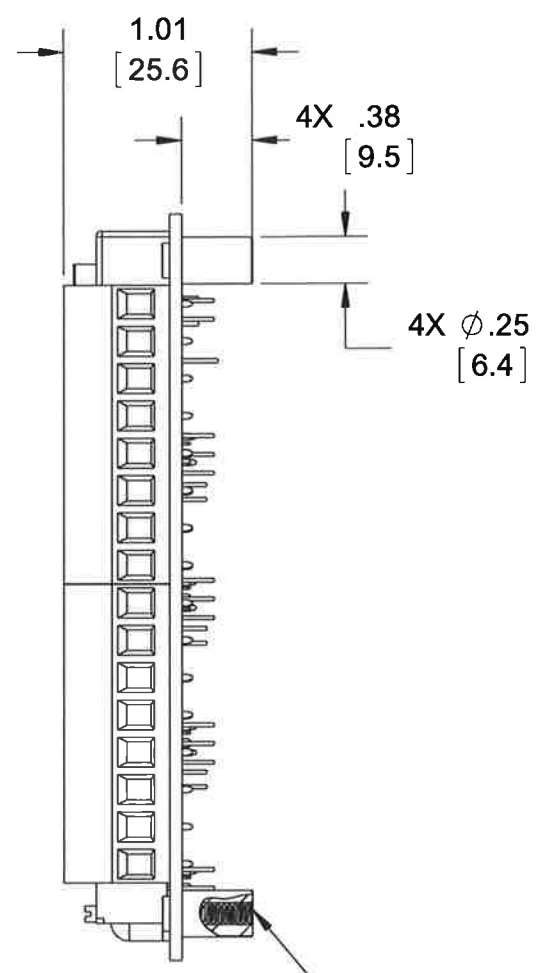
A

A



- CH1 - SIG
- CH1 - COM
- CH2 - SIG
- CH2 - COM
- CH3 - SIG
- CH3 - COM
- CH4 - SIG
- CH4 - COM

- 20-36VDC RETURN
- CH1 - AC
- CH1 - DC
- CH1 - GND
- CH2 - AC
- CH2 - DC
- CH2 - GND
- CH3 - AC
- CH3 - DC
- CH3 - GND
- CH4 - AC
- CH4 - DC
- CH4 - GND
- DIGITAL OUT
- GND RETURN



4X STANDOFF, 6-32 THREAD

4X JUMPER WIRES

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED:  
 INTERPRET DIM & TOL PER ASME Y14.5M - 1994.  
 REMOVE BURRS.  
 COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA.  
 CHAM EXT THDS 45° TO MINOR DIA.  
 THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS.  
 DIMENSIONS APPLY AFTER FINISHING.

ALL MACHINED SURFACES.  
 TOTAL RUNOUT WITHIN .005.  
 BREAK SHARP EDGES .005 TO .010.  
 MACHINED FILLET RADII .005 TO .015.  
 WELDING SYMBOLS PER AWS A2.4.  
 ABBREVIATIONS PER MIL-STD-12.

UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN INCHES.  
 DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS TOLERANCES ARE:

DECIMALS	METRIC	ANGLES
.XX ±.03	.X ± 0.8	±1°
.XXX ±.010	.XX ±0.25	

APPROVALS		DATE
ORIG	RA	02/21/08
CHK	JS	02/22/08
APP	DV	02/25/08

DO NOT SCALE DRAWING



TITLE: **OUTLINE/INSTALLATION DWG, QUAD SENSOR CONDITIONER, WITH IEPE EXCITATION, MODEL 4007**

SIZE	CAGE CODE	DWG NO	REV
B	2W033	127-4007	B

SCALE: 1:1 SHEET 1 OF 1

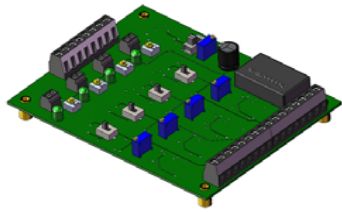
**Model Number**  
4007

# PERFORMANCE SPECIFICATIONS

**DOC NO**  
PS4007

## 4 CHANNEL SIGNAL CONDITIONER

REV B, ECN 10202 -, 07/29/13



- DESIGNED TO BE USED WITH IEPE SENSORS ACCELEROMETERS AND PRESSURE TRANSDUCERS
- TRUE RMS CONVERSION OUTPUT
- DIGITAL LOGIC OUTPUT FOR SENSOR CONNECTIVITY INDICATION

### PHYSICAL

Weight, Max 104.0 grams

### Input Specifications (4 Channels)

Transducer Excitation Current [1] 2.5-10 (adjustable) mA  
 Compliance Voltage >18 VDC  
 Full Scale Input, Max 2 Vrms  
 Input Impedance >100 Kohm  
 Board Supply Voltage Required 20-36 VDC  
 Board Supply Current Required 100 mA  
 Connector Two Screw Terminals

### Output Specifications (AC)

Maximum Output 2.0 Vrms  
 Current Output, Minimum 5.0 mA  
 Impedance <50 Ohms  
 AC Offset +/- 50mV 0 mV  
 Connector Two Screw Terminals

### Conditioning

Gain(AC Output) +/- 0.05% 1  
 Freq Response -3db (3KHz Low Pass) 0.5-3000 Hz  
 +/- 300Hz (10KHz Low Pass) 0.5-10000 Hz  
 Low Pass Filter Cutoff -12 dB/Octave  
 Coupling Time Constant [2] >5 SEC

### Output Specifications (DC)

Gain [3] 2.66 mVdc/mVrms  
 Minimum Output +/-50mV 5 Vdc  
 Current 5 mA  
 Output Impedance 15 Ohms  
 Offset +/- 0.05V [4] 1 Vdc  
 Connector Two Screw Terminals

### Logical Output (Channel 1 Only)

Signal Voltage [5] 5 Vdc  
 Signal Current 30 mA

### Environment Specification

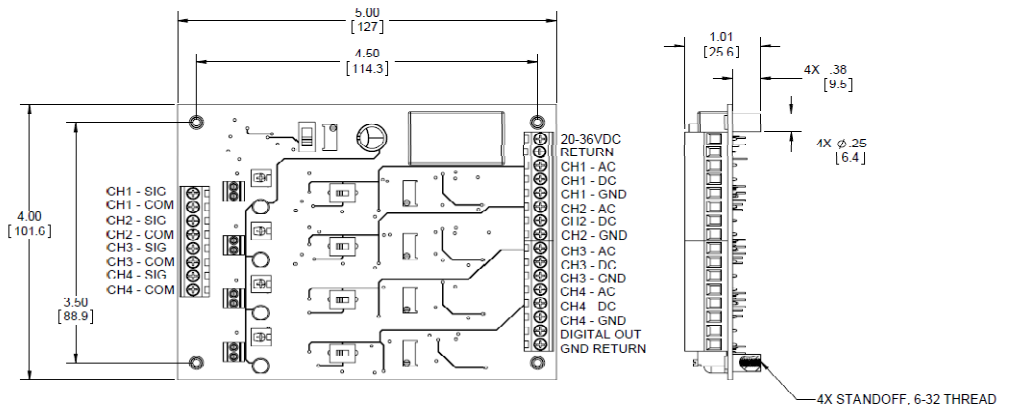
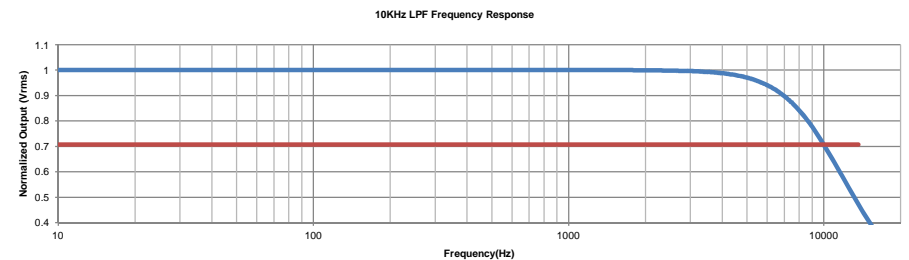
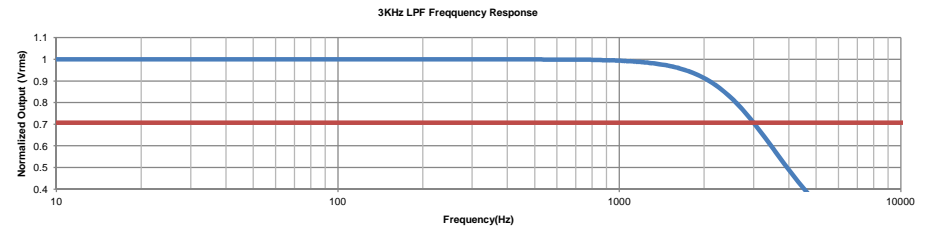
Operating Temperature -40 to 85 °C

### Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

### Notes:

- [1] Calibration is performed with 4mA supply current
- [2] Coupling time constant may vary depending on the sensor connected to the input terminal.
- [3] DC gain can be adjusted per customer's request
- [4] Output DC offset can be adjusted with one potentiometer for all four channels
- [5] Logic output indicates if channel 1 sensor is operational. The Logical state of the switch can be selected by setting SW2
- [6] In the interest of constant product improvement, we reserve the right to change specifications without notice.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-4007 for more information.



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