

PERFORMANCE SPECIFICATIONS

DOC NO PS4007

4 CHANNEL SIGNAL CONDITIONER

REV C, ECN 16315, 09/22/21



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	Kohn
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	mΑ
Impedance	<50	Ohms
AC Offset +/- 50mV	0	mV

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 Const	ant [2]	>5	SEC
I			

Two Screw Terminals

Output Specifications (DC)

Gain [3]		2.66	mvac/mvrms
Minimun	n Output +/-50mV	5	Vdc
Current		5	mA
Output I	mpedance	15	Ohms
Offset +	/- 0.05V [4]	1	Vdc
Connect	or	Two Screw Terminals	

Logical Output (Channel 1 Only)

Signal Voltage [5]	5	Vdc
Signal Current	30	mΑ

Environment Specification

Operating Temperature -40 to 85 °C

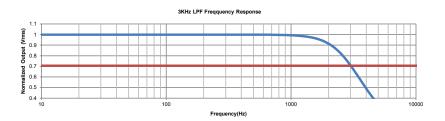
Supplied Accessories:

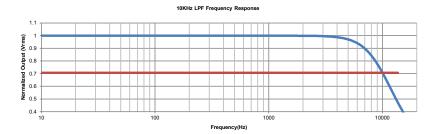
1) Accredited calibration certificate (ISO 17025)

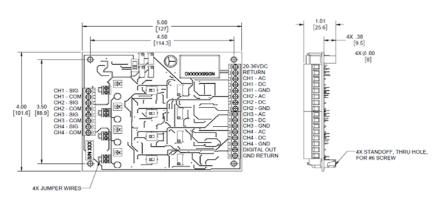
Notes:

- [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.

It is in the customer's responsibility to validate that a particular product with the properites described in the product specification is suitable for using in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.







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

