

Model Number
4791A

PERFORMANCE SPECIFICATIONS

PS4791A

4791A TRUE RMS VIBRATION METER WITH ALARM RELAY

REV B, ECN 17542, 07/145/24



- DESIGNED TO OPERATE WITH IEPE ACCELEROMETERS
- CONVERTS AC ACCELERATION TO DC RMS LEVEL
- VARIABLE RANGE AND SENSITIVITIES
- ACCELERATION LEVEL DRIVEN ALARM WITH RELAY OUTPUT
- HP AND LP FILTERS, USER SELECTABLE

		ENGLISH		SI	
PHYSICAL					
Weight		2.38	Lbs	1.08	kg
Overall size	HxWxD	2.3 x 7.9 x 8.1	IN	6 x 20 x 20	cm
Case Material		Anodized Aluminum		Anodized Aluminum	
Mounting		Mounting Ears		Mounting Ears	
PERFORMANCE					
Voltage input (Peak)		+/-5	Vpeak	+/-5	Vpeak
Sensor sensitivity		4.6-110.5	mV/g	0.47-11.26	mV/ m/s <sup>-</sup>
IEPE Compliance Voltage[1]		>19	VDC	>19	VDC
IEPE Limited Current		3.8 - 7.0	mA	3.8 - 7.0	mA
HP -3dB Frequency Selection	(4 Pole, Butterworth)	1, 2, 3, 5, 10, 20	Hz	1, 2, 3, 5, 10, 20	Hz
LP -3dB Frequency Selection	(4 Pole, Butterworth)	1, 2, 3, 5, 7, 10	kHz	1, 2, 3, 5, 7, 10	kHz
Gain[2]	(User Selectable)	x1, x5, x10		x1, x5, x10	
AC Output[2]	Range	+/-5	Vpeak	+/-5	Vpeak
	Output Impedance	<10	Ohm	<10	Ohm
VDC Output[3]	Range	0-10	VDC	0-10	VDC
	Conversion Factor	0.05 - 1.00	VDC/G(RMS)	0.005 - 0.10	VDC/m/sec2(RMS)
	Adjustment Increment	0.01 <10	VDC/G(RMS) Ohm	0.001 <10	VDC/m/sec2(RMS) Ohm
	Output Impedance	<10 1		1	mA
l.,	Current Output		mA		mA m/sec <sup>2</sup> (RMS)
Alarm	Range	1.0-199.9	G(RMS)	9.81-1,961	
	Adjustment Increment	0.1	G(RMS)	0.981	m/sec <sup>2</sup> (RMS)
Alarm Relay	Max Current (28VDC)	1	Α	1	Α
	Max Current (110VAC)	0.5	Α	0.5	Α
ELECTRICAL					
Power	Voltage	110/220	VAC	110/220	VAC
	Current, Max	0.7	Α	0.7	Α
					•
ENVIRONMENTAL			-		_
Temperature	Operating	32-158	°F	0-70	°C
	Storage	14-200	°F	-10-94	°C
Vibration	1-2kHz, Random	5	G(RMS)	49	m/sec <sup>2</sup> (RMS)
Shock	10mS, Half-Sine	100	Gpeak	981	m/sec <sup>2</sup> (Peak)
			•	•	•

This family also inc	mily also includes:							
Model	Sensitivity (mV/g)	Frequency Response, ±10% (Hz)	Time Constant (Sec)	Operating Temp (°F)				

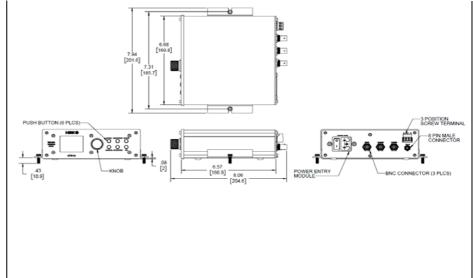
Refer to the performance specifications of the products in this family for detailed description

## Supplied Accessories:

- 1) Mounting hardware, model 69162, 2 pc.
- 2) ISO 17025 Accredited Calibration Certificate

## Notes:

- [1] Maximum Bias Voltage of the Sensor is 13 VDC for Full Scale Input
- [2] The AC output is conditioned by HP/LP filters and gain settings
- [3] The VDC output is scaled in VDC/G(RMS)
- [4] In the interest of constant product imrpovement, we reserve the right to change specifications without notice. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. 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 127-4791A for more information.



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