



Accelerometer Pod (Model EP312)



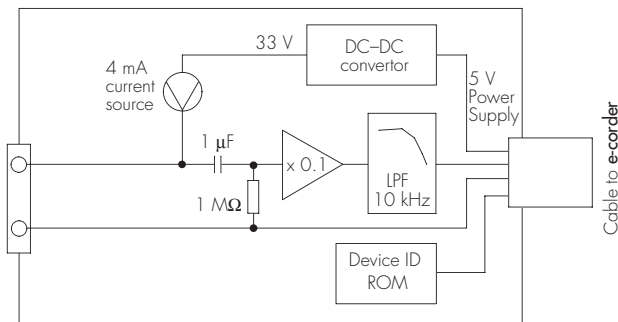
- Software-controlled
- Plug and play installation with **e-corder**
- ± 20 V input range
- Accepts most ICP[®] transducers
- Calibrate in user-defined units

Description

A compact signal conditioner for use with an **e-corder** unit, providing a continuous AC coupled signal from PCB Piezotronics ICP[®] accelerometers, microphones, vibration and related sensors requiring a constant current supply. See www.pcb.com for suitable sensors.

Theory of Operation

An ICP[®] sensor comprises a charge generator the output of which is proportional to acceleration. This charge, applied to the gate of the FET varies its output impedance. A constant current applied to the output impedance produces a voltage signal proportional to the acceleration. (See block diagram, below.)



Specifications

Input impedance:	1 MΩ ± 1%
Coupling capacitor:	1 μF
Current source:	4 ± 0.01 mA
Constant current compliance:	33 ± 1 V
Gain:	0.0998 – 0.1002
Maximum input:	±20 V
Maximum output signal:	±2 V
High pass filter:	0.16 Hz, 1st order
Low pass filter:	10 kHz*, 3rd order Bessel
Frequency response:	0.16 – 10 kHz*
Amplifier noise:	< 1 μV pp, 0.1 – 10 Hz
Input connection:	BNC connector
Dimensions (l x w x h):	108 x 58 x 35 mm (4.25" x 2.28" x 1.38")
Weight:	~200 g (7 oz)
<i>eDAQ Pty Ltd reserves the right to alter these specifications at any time.</i>	

* Extendable to 20 kHz on special order

Stacking and Unstacking Pods

Pods stack by clicking into place on top of each other. To separate stacked Pods, push the top Pod towards the back and then pull them apart from the back. (See picture on right.)



WARRANTY: eDAQ Hardware units are supported by a one year warranty

www.eDAQ.com

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