

- **Low Noise**
- **Wide Temperature Range**
- **Low Power**
- **Rugged**



EA-120 Triaxial Force Balanced Accelerometer

The EA-120 occupies the medium range of the Force Balance Accelerometer line. It offers low noise, high dynamic range, in a frequency band of DC to 50 Hz. It is perfectly suited for most strong motion monitoring applications. The EA-120 standard packaging is an open-ended 3 1/4 inch plate that can be mounted internally in the eentec recorder or the R-1 Triaxial Rotational Sensor. Optional freestanding field or borehole packages are available. The sensor elements are housed in an epoxy sealed aluminum case. They are extremely rugged, and designed for long-term deployment in field environments. Unlike solid-state type accelerometers, the EA-120 does not experience significant drifting with temperature changes. Options include a variety of full-scale "g" levels, user selectable full-scale "g" ranges, and other frequency bands.

Specifications	
Full Scale Range Standard	±2 g
Optional	±0.5g to ±5g
Dynamic Range	128 dB ± 5V 135 dB ± 10V
Frequency Band Standard	DC to 50 Hz +1, -3 dB (damping 70% critical)
Optional	DC to 100Hz or 200Hz +1, -3 dB
Output Signal Swing	0.5 to 4.5V or ±2.5V, ±5V, ±10 V, (opt differential)
Resolution (at ±10 V)	0.4 µg @ 1g 0.8 µg @ 2g
Zero G bias	± 0.005g, optional electronic adjustment
Bias Shift over temperature	>0.3mV/deg C
Linearity	± 0.2% FS over temperature range (0.1% opt)
Cross Axis Sensitivity	0.02 g/g (0.005 g/g option)
Operation Temperature Standard	-10° to 75° C (Optional high temperature versions available)
Power Supply	12 VDC (opt overvoltage and lightning protection)
Supply Current Maximum	30 ma (triaxial)
Vibration Survival	10 g (p-p), 2 to 2,000 Hz
Shock Survival	1000 g, 1 ms 100 g, 11 ms
Humidity	95% R.H. (opt. SS 100%R.H.)
Housing Standard	Open Internal Mount 3.25" plate appx.
Optional	Field Enclosure, SS (stainless steel), Borehole
Specifications subject to change.	