

- **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. | |