



AFB FORCE BALANCE ACCELEROMETER

Solgeo Models AFB Force Balance Accelerometers are high-sensitivity, low noise sensors designed for use in seismic and low level, low frequency motion studies. The accelerometers are self-contained and provide a high level, low impedance output. No signal conditioning is required in most applications.

These sensors utilize low noise electronics in conjunction with the force balance principle to make possible measurements in the low frequency micro-G range. Aside from the traditional DC-coupled zero output, the AFB-3C & 2C & 1C also provides AC-coupled zero output which eliminates tilt-induced or offset errors facilitating high amplification of the basic output.



TECHNICAL FEATURES

ELECTRONIC FEATURES	1, 2 or 3 axis
Ranges Available	$\pm 0.25\text{ G}$, $\pm 0.5\text{ G}$, $\pm 1\text{ G}$, $\pm 2\text{ G}$, $\pm 4\text{ G}$
Output Voltage	± 10 Volts differential
Bandwidth	Standard 0-200 Hz
Input test	1/8 FS
Nominal Sensitivity	2.5 V/g
Orthogonality error	< 0.01%
Dynamic range	>165dB (from 0.1Hz to 20Hz with +/-1g setup)
Offset drift	0.000001 g/°C
Damping	0.707
Cross Axis Sensitivity	<0.3%
Non-Linearity	<0.1% F.R.
Supply voltage	10-15V DC (80mA for 3 axis unit)
ENVIROMENTAL	
Temperature, Operating	-20 To +55 Deg C
Temperature, Storage	-40 To +90 Deg C
Humidity	100% R.H.
PHYSICAL	
Weight	3 kg
Size	14cm L x 15.5cm W x 8.5cm H (without connectors)
Case Material	Aluminium
Protection	IP66 (IP67, IP68 optinonally)
Connector	MIL-C-10

