

# AFB - FORCE BALANCE ACCELEROMETER

Accelerometer Force Balance AFB is a high sensitivity sensor for long-term monitoring of dams and buildings, ideal for studying seismic events at low frequencies of motion.

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.

## APPLICATIONS

- Long-term monitoring on dams, buildings and heritage structures
- Monitoring that requires higher sensitivity



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## TECHNICAL CHARACTERISTICS

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	$\pm 10$ Volts differential
Bandwidth	Standard 0-200 Hz
Input test	1/8 FS
Nominal sensitivity	2.5 V/g
Orthogonality error	<0.1%
Dynamic range	>165dB (from 0.1Hz to 20Hz with $\pm 1\text{G}$ setup)
Offset drift	0.000001 g/°
Damping	0.707
Cross axis sensitivity	<0.3%
Non linearity	<0.1% F.R.
Supply voltage	10-15V DC (80mA for 3 axis unit)

## ENVIRONMENTAL CHARACTERISTICS

Temperature operating	-20 to +70 Deg C
Temperature storage	-40 to +90 Deg C
Humidity	100% R.H.

## PHYSICAL CHARACTERISTICS

Weight	3 kg
Size	14cm L x 15.5cm W x 8.5cm H (without connectors)
Case material	Aluminium
Protection	IP66 (IP67, IP68 optionally)
Connector	MIL-C-10

Contact now your  
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