

# AFB FORCE BALANCE ACCELEROMETER

AFB Force Balance Accelerometers are high sensitivity, low noise sensors designed for use in seismic and low level, low frequency motion studies such as use in metro rail structures for earthquake warning systems, dam structures for structural monitoring, large building structures and buildings of historical importance amongst other applications.

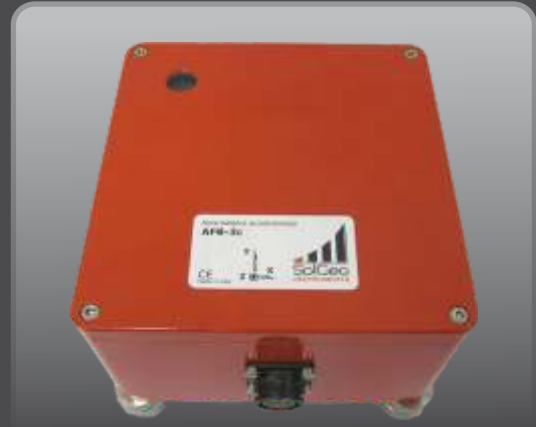
No signal conditioning is required in most applications.

The sensors utilize low noise electronics in conjunction with force balance principle to make possible measurements in the low frequency micro G range.

Aside from traditional DC Coupled zero output, the AFB-3C, 2C and 1C accelerometers also provide AC Coupled zero output which eliminates tilt induced or offset errors facilitating high amplification of the basic output.

When used with a DYMAS seismic recorder, the AFB Accelerometer is ideal for utilization in monitoring and recording of ground acceleration— And based on the digital I/O trigger alarms - send SMS or email, or even interface with existing SCADA via LAN or other communication mediums such as fiber optic etc.

The AFB Accelerometer are IP66 rated and available optionally in IP67 / IP68 100% water proof configuration .  
The AFB Accelerometers are available in range of +/- 0.25G, +/-0.5G, +/- 1G, +/- 2G, +/-4G with **capability to adjust G range.**



## Features:

- Adjustable G range.
- High Dynamic range of >165dB.
- Large bandwidth range of 0 to 200Hz.
- Equipped with military connector.

## Specification:

ELECTRONIC FEATURES	
No. of Axis:	1,2 or 3 axis
Ranges Available:	±0.25 G, ±0.5 G, ±1 G, ±2 G, ±4 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% RH
PHYSICAL	
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

