

Tri-axial low frequency IEPE accelerometer



Features

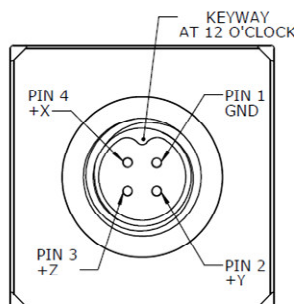
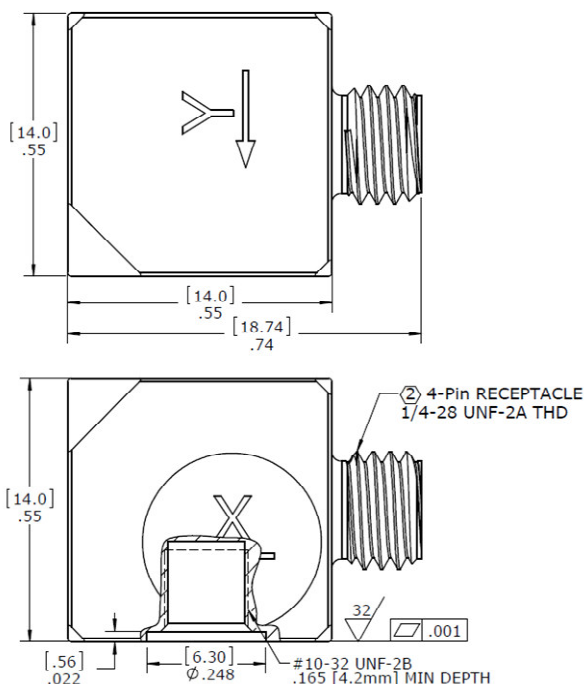
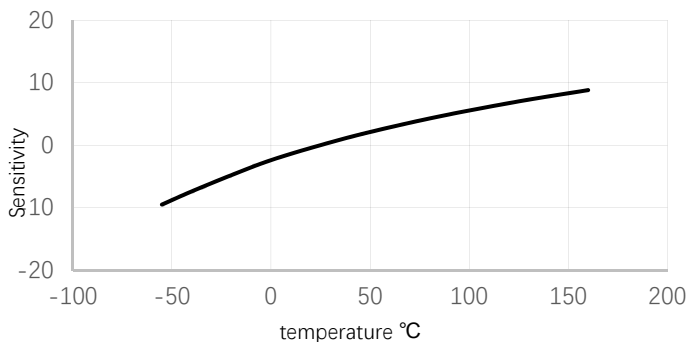
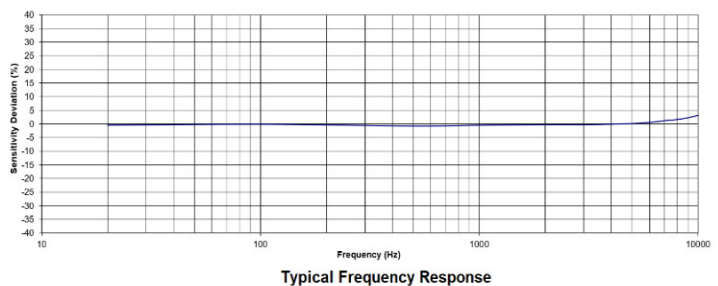
- High-temp IEPE
- Flexible cable exit
- Adhesive or screw mounting
- Hermetic sealed
- Annular shear mode
- Tri-axial measurement
- Mounting isolated optional

Application

- Aircraft testing
- Shock testing
- Road testing
- Modal analysis
- Engine testing

Description

Model 560AH is a high temperature IEPE tri-axial accelerometer designed for small size applications. The accelerometer uses shear piezo electrical element which provides a wide operating frequency range. The IEPE sensor combines outstanding crystals and low noise integral microelectronics to achieve very low sensitivity variation over the operating temperature range, compared to other sensing element designs. The shear element technology also ensures high immunity to base strain errors. The accelerometer uses a welded titanium construction for low mass and a light weight 4 pin connector. Excellent frequency response, both amplitude and phase, provide the user with a triaxial accelerometer ideally suited for structural and component testing, drop tests and general laboratory vibration work. The small cube size of this accelerometer enables the test engineer or technician to measure the accelerations of three orthogonal axes of vibration simultaneously on lightweight structures.



Specification

Typical at +24°C (+75°F), 24Vdc, 4 mA and 100Hz, unless otherwise stated.

Measurement range	±50	±100	±200	±500	±2000	g
Sensitivity, ±10%	100	50	25	10	2.5	mV/g
Frequency response, ±5%	1~5000	1~5000	1~5000	1~5000	1~5000	Hz
Frequency response, ±10%	0.5~8000	0.5~8000	0.5~8000	0.5~8000	0.5~8000	Hz
Resonant frequency	25	25	25	25	25	kHz
Transverse sensitivity	<5	<5	<5	<5	<5	%
Temperature response, -55 to +162°C	±15	±15	±15	±15	±15	%
Non-linearity	±1	±1	±1	±1	±1	%FSO
Residual noise (2 Hz to 20 KHz)	0.0001	0.0002	0.0002	0.0005	0.0025	Equiv. g RMS
Operating temperature	-55 to +162	-55 to +162	-55 to +162	-55 to +162	-55 to +162	°C
Shock limit	5000	5000	5000	5000	5000	g

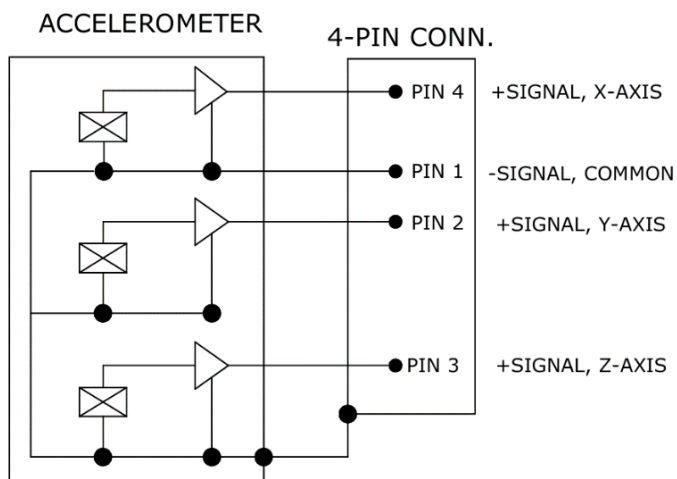
Parameters	Value	Units
Bias voltage (room temperature)	8 to 12	Vdc
Bias voltage (-55°C to 162°C)	6 to 13	Vdc
Output impedance	<100	Ω
Full scale output voltage	±5	V
Insulation resistance (@100Vdc)	>100	MΩ
Supply (compliance) voltage	18 to 30	Vdc
Supply current(-55~125) °C	2 to 10	mA
Supply current(125~162) °C	2 to 4	mA
Humidity	Hermetically sealed	
Case material	Titanium alloy	
Sensing element	Piezo ceramic	
Weight	12	Grams
Mounting torque	18 (2)	lb-in (N-m)

Accessories

Calibration certificate included.

Part Number	Description	Availability
PM0231	Mounting stud 10-32 to 10-32 thread	One stud Included
PM0356	Mounting stud 10-32 to M5 thread	
MB0013	Magnet mounting adapter	Optional
PM0276	Adhesive mounting adapter	Optional
13M4-3	3 meter mating cable with 4 pins mating connector to 3X BNC(male) connector	Optional
IN-03	3 channels IEPE signal conditioner	Optional
IN-91	Portable vibration analyzer	Optional
IN-3062	8 channels data acquisition system	Optional

Measurement configuration



Ordering information

560	AH	-	50
Model	Output signal	-	Range
560	A=IEPE output H=High temperature applicable	-	10=10g 50=50g 100=100g 200=200g 500=500g 2000=2000g

