

Comparison standard accelerometer



Features

- Laboratory standard
- CNAS traceable calibration
- Hermetic seal
- •Ultra-stable output
- •Wide frequency response
- Shock duration

Application

- •Back to Back comparison
- Accelerometer calibration
- •Vibrator control
- •Vibration standard
- Shock calibration



Description

The model 910A is a comparison standard accelerometer designed specifically for accelerometer calibration. It transfer standard accelerometer for calibration of back-to-back working standards and reference standards built into shakers. The unit is hermetically sealed and ideal for long term reference standard. This sensor is the industry standard for vibration/shock calibration. The model 910A provide Ultra-stability performance and flat high frequency response by reliable crystal sensing element. Model 910 offer double side(Top & Bottom) 1/4-28 thread hole for shaker mounting and the sensor under test. Features a button configuration, model 910A operating in compress mode. The specially designed crystal exhibit low base strain sensitivity and high resonance frequency, and excellent output stability over time. Signal ground is connected to the outer case of the unit, an insolation washer is available by option. The accelerometer features a 10-32 side connector and requires a coaxial cable for measurement operation. Senther's model 11-3 is a 10-32 to BNC breakout coaxial cable for the sensor.





Specification

All values are typical at +24°C $\,(+75^{o}F)\,$ and 100Hz unless otherwise stated

Sensitivity, typical	10	mV/g
Sensitivity, Minimum	8	mV/g
Frequency Response ±5%	1-10000	Hz
Frequency Response ±3dB	0.5-15000	Hz
Resonant Frequency	38	kHz
Transverse Sensitivity	<3	%
Temperature Response, -55 to +125°C	±3	%
Linearity	±0.5	%FSO
Dynamic Range	±500	g
Shock Limit	±5000	g
Sensitivity Stability, Max.	±0.2% per year	

PARMETERS	VALUE	UNITS
Bias Voltage (Room Temp.)	9-11	Vdc
Bias Voltage (-50~125) °C	8-12	Vdc
Output Impedance	<100	Ω
Full Scale Output Voltage	±5	V
Insulation Resistance	>100	MΩ
Supply Voltage	18-30	VDC
Supply Current	2 to 10	mA
Operating and Storage Temperature	-50~+125	°C
Sensing Element	Piezo Quartz	
Sensing Geometry	Compress	
Housing Material	316L Stainless Steel	
Sealing	Welded Hermetic	
Grounding	Signal return connected to case	
Weight	69	Gram

Accessories

Calibration certificate included.

Part Number	Description	Availability
PM0011	Mounting stud 1/4-28 to 1/4-28 thread	Included
PM0385	Mounting stud 1/4-28 to M5 thread	Included
PM0386	Mounting stud 1/4-28 to 10-32 thread	Included
11-3	3 meter mating cable with 10-32(male) to BNC(male) connector	Optional
10-3	3 meter mating cable with 10-32(male) to 10-32(male) connector	Optional
IN-03	3 channels IEPE signal conditioner	Optional



Measurement configuration



Ordering information

910	Α
Model	Output signal
910	A=IEPE configuration





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