

# Ultra quiet, ultra low-frequency accelerometer

## 731A



### SPECIFICATIONS

Sensitivity, $\pm 10\%$ , 25°C		10 V/g
Acceleration range		0.5 g peak
Amplitude nonlinearity		1%
Frequency response:	$\pm 10\%$	0.10 - 300 Hz
	$\pm 3$ dB	0.05 - 450 Hz
Resonance frequency		750 Hz
Transverse sensitivity, max		1% of axial
Temperature response:	-10°C	-12%
	+65°C	+5%
Power requirement:		
Voltage source		18 - 30 VDC
Current regulating diode		2 - 10 mA
Electrical noise, equiv. g:		
Broadband	2.5 Hz to 25 kHz	0.5 $\mu$ g
Spectral	2 Hz	0.03 $\mu$ g/ $\sqrt{\text{Hz}}$
	10 Hz	0.01 $\mu$ g/ $\sqrt{\text{Hz}}$
	100 Hz	0.004 $\mu$ g/ $\sqrt{\text{Hz}}$
Output impedance, max		100 $\Omega$
Bias output voltage		9 VDC
Grounding		case isolated
Temperature range		-10° to +65°C
Vibration limit		10 g peak
Shock limit		fragile
Electromagnetic sensitivity at 60 Hz		20 $\mu$ g/gauss
Sealing		hermetic
Base strain sensitivity, max		0.0001 g/ $\mu$ strain
Sensing element design		PZT ceramic / flexure
Weight		760 grams
Case material		316L stainless steel
Mounting		3/8-16 tapped hole
Output connector		2 pin, MIL-C-5015 style
Mating connector		R6 type
Recommended cabling		J9 / J9T2A

**Note:** Special handling required due to sensitivity; wooden protective case included.

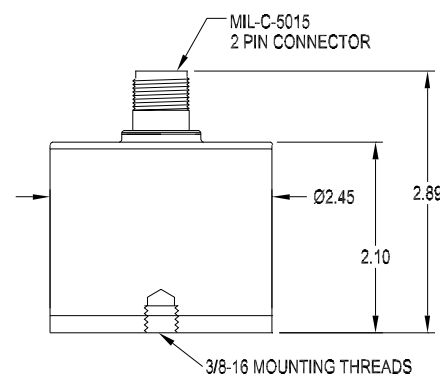
**Accessories supplied:** SF7 mounting stud; calibration data (level 3)

**Options:** Power unit/amplifier model P31



### Key features

- Ultra low-noise electronics for clear signals at sub- $\mu$ g levels
- Ultra high sensitivity
- Manufactured in ISO 9001 facility



Note: Due to continuous process improvement, specifications are subject to change without notice.  
This document is cleared for public release.

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Connections	
Function	Connector pin
power/signal	A
common	B
ground	shell