Biaxial, low profile, underwater accelerometer

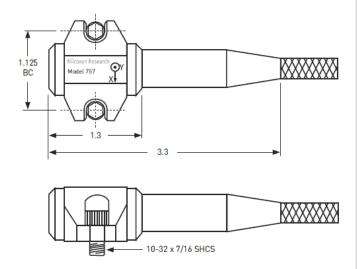


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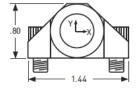


Key features

- Rugged
- General purpose underwater accelerometer
- Industrial
- Easy to mount
- Bi-axial measurements



Connections	
Function	Connector
х	white
У	black
common	shield



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

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SPECIFICATIONS

Acceleration range50 g peakAmplitude nonlinearity1%Frequency response: Both channels, ± 10%2 - 2,000 HzTransverse sensitivity, max5% of axialTemperature response: -20° C +90° C-5% +5%Power requirement: Voltage source Current regulating diode18 - 30 VDC 2 - 10 mAElectrical noise, equiv. g, nominal: Broadband Spectral10 Hz 100 Hz 1,000 Hz100 μg 1 μg/\Hz 1 μg/\HzSpectral10 Hz 1,000 Hz10 μg/\Hz 1,000 HzOutput impedance, max100 ΩBias output voltage, nominal12 VDCGroundingcase isolated, internally shieldedTemperature range-50 to +80° CHydrostatic pressure, max650 psiVibration limit500 g peakShock limit5,000 g peakElectromagnetic sensitivity, equiv. g100 μg/gaussBase strain sensitivity0.002 g/μstrainWeight110 gramsCase material316L stainless steelMountingtwo 10-32 x 7/16 SHCS on 1.125 bolt circleRecommended cablingJ81S, 10 ft., stainless steel braid	Sensitivity, ±10%, 25° C	100 mV/g
Frequency response: Both channels, ± 10% Transverse sensitivity, max 5% of axial Temperature response:	Acceleration range	50 g peak
Both channels, ± 10% 2 - 2,000 Hz	Amplitude nonlinearity	1%
Temperature response: $ -20^{\circ} C \\ +90^{\circ} C \\ +90^{\circ} C \\ +5\% \\ \\ Power requirement: \\ Voltage source \\ Current regulating diode \\ 2 - 10 \text{ mA} \\ \\ Electrical noise, equiv. g, nominal: \\ Broadband & 2.5 \text{ Hz to 25 kHz} \\ Spectral & 10 \text{ Hz} \\ 100 \text{ Hz} \\ 1,000 \text{ Hz} & 100 \mu\text{g} \\ 1,000 \text{ Hz} & 0.5 \mu\text{g}/\text{Hz} \\ 0.5 \mu$		2 - 2,000 Hz
-20° C +90° C +5% Power requirement: Voltage source 18 - 30 VDC Current regulating diode 2 - 10 mA Electrical noise, equiv. g, nominal: Broadband 2.5 Hz to 25 kHz 100 μg Spectral 10 Hz 10 μg/√Hz 100 Hz 1 μg/√Hz 1,000 Hz 1,000 Hz 1,000 Hz 1,000 Hz Output impedance, max 100 Ω Bias output voltage, nominal 12 VDC Grounding case isolated, internally shielded Temperature range -50 to +80° C Hydrostatic pressure, max 650 psi Vibration limit 500 g peak Electromagnetic sensitivity, equiv. g 100 μg/gauss Base strain sensitivity 0.002 g/μstrain Weight 110 grams Case material 316L stainless steel Mounting two 10-32 x 7/16 SHCS on 1.125 bolt circle	Transverse sensitivity, max	5% of axial
Voltage source Current regulating diode Current regulating diode Electrical noise, equiv. g, nominal: Broadband Spectral 10 Hz 100 Hz 1,000 Hz 1,000 Hz 1,000 Hz 10.5 μg/√Hz 100 Ω Bias output voltage, nominal Electrorange Grounding Case isolated, internally shielded Temperature range Hydrostatic pressure, max 650 psi Vibration limit 500 g peak Electromagnetic sensitivity, equiv. g Base strain sensitivity 0.002 g/μstrain Weight 110 grams Case material Mounting 18 - 30 VDC 2 - 10 mA 100 μg μg/Πμ2 100 μg/√Hz 100 μg/√Hz 100 μg/√Hz 100 μg/γHz 100 μg/γHz 100 μg/σμαν 100 μg/gauss 100 μg/gauss 100 μg/gauss 110 grams	–20° C	
Broadband Spectral 10 Hz 10 μg/√Hz 10 μg/√Hz 1 μg/√Hz 1 μg/√Hz 0.5 μg/√Hz Output impedance, max 100 Ω Bias output voltage, nominal 12 VDC Grounding case isolated, internally shielded Temperature range −50 to +80° C Hydrostatic pressure, max 650 psi Vibration limit 500 g peak Shock limit 5,000 g peak Electromagnetic sensitivity, equiv. g 100 μg/gauss Base strain sensitivity 0.002 g/μstrain Weight 110 grams Case material 316L stainless steel Mounting two 10-32 x 7/16 SHCS on 1.125 bolt circle	Voltage source	
Bias output voltage, nominal12 VDCGroundingcase isolated, internally shieldedTemperature range-50 to +80° CHydrostatic pressure, max650 psiVibration limit500 g peakShock limit5,000 g peakElectromagnetic sensitivity, equiv. g100 μg/gaussBase strain sensitivity0.002 g/μstrainWeight110 gramsCase material316L stainless steelMountingtwo 10-32 x 7/16 SHCS on 1.125 bolt circle	Broadband 2.5 Hz to 25 kHz Spectral 10 Hz 100 Hz	10 μg/√Hz 1 μg/√Hz
Groundingcase isolated, internally shieldedTemperature range-50 to +80° CHydrostatic pressure, max650 psiVibration limit500 g peakShock limit5,000 g peakElectromagnetic sensitivity, equiv. g100 μg/gaussBase strain sensitivity0.002 g/μstrainWeight110 gramsCase material316L stainless steelMountingtwo 10-32 x 7/16 SHCS on 1.125 bolt circle	Output impedance, max	100 Ω
Temperature range-50 to +80° CHydrostatic pressure, max650 psiVibration limit500 g peakShock limit5,000 g peakElectromagnetic sensitivity, equiv. g100 μg/gaussBase strain sensitivity0.002 g/μstrainWeight110 gramsCase material316L stainless steelMountingtwo 10-32 x 7/16 SHCS on 1.125 bolt circle	Bias output voltage, nominal	12 VDC
Hydrostatic pressure, max 650 psi Vibration limit 500 g peak Shock limit 5,000 g peak Electromagnetic sensitivity, equiv. g 100 μg/gauss Base strain sensitivity 0.002 g/μstrain Weight 110 grams Case material 316L stainless steel Mounting two 10-32 x 7/16 SHCS on 1.125 bolt circle	Grounding	case isolated, internally shielded
Vibration limit500 g peakShock limit5,000 g peakElectromagnetic sensitivity, equiv. g100 μg/gaussBase strain sensitivity0.002 g/μstrainWeight110 gramsCase material316L stainless steelMountingtwo 10-32 x 7/16 SHCS on 1.125 bolt circle	Temperature range	–50 to +80° C
Shock limit5,000 g peakElectromagnetic sensitivity, equiv. g100 μg/gaussBase strain sensitivity0.002 g/μstrainWeight110 gramsCase material316L stainless steelMountingtwo 10-32 x 7/16 SHCS on 1.125 bolt circle	Hydrostatic pressure, max	650 psi
Electromagnetic sensitivity, equiv. g Base strain sensitivity 0.002 g/μstrain Weight 110 grams Case material 316L stainless steel two 10-32 x 7/16 SHCS on 1.125 bolt circle	Vibration limit	500 g peak
Base strain sensitivity0.002 g/μstrainWeight110 gramsCase material316L stainless steelMountingtwo 10-32 x 7/16 SHCS on 1.125 bolt circle	Shock limit	5,000 g peak
Weight 110 grams Case material 316L stainless steel Mounting two 10-32 x 7/16 SHCS on 1.125 bolt circle	Electromagnetic sensitivity, equiv. g	100 μg/gauss
Case material316L stainless steelMountingtwo 10-32 x 7/16 SHCS on 1.125 bolt circle	Base strain sensitivity	0.002 g/µstrain
Mounting two 10-32 x 7/16 SHCS on 1.125 bolt circle	Weight	110 grams
	Case material	316L stainless steel
Recommended cabling J81S, 10 ft., stainless steel braid	Mounting	two 10-32 x 7/16 SHCS on 1.125 bolt circle
	Recommended cabling	J81S, 10 ft., stainless steel braid

Contact

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Accessories supplied:

- Calibration data
- Two 10-32 x 7/16 SHCS

Accessories available: power supplies, amplifiers, signal conditioners

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