

Low-frequency vector sensor

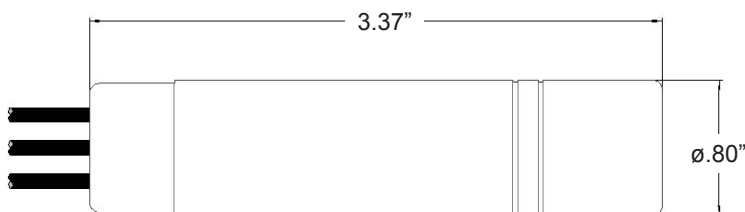
VS-301

SPECIFICATIONS

Output sensitivity:	
Accelerometer	10 V/g
Hydrophone	-162 dB re 1.0 V/ μ Pa
Full scale input range:	
Accelerometer	0.5 g peak
Hydrophone	600 Pa peak
Frequency response, ± 3 dB:	
Accelerometer, 0.2 Hz	3.0 Hz - 2.0 kHz
Hydrophone, 6.0 Hz	3.0 Hz - 2.0 kHz
Transverse sensitivity, max	<5%
Temperature accuracy	$\pm 1.0^\circ\text{C}$
Power requirement:	
Voltage	6.5 - 9.0 VDC
Current, nominal	40 mA
Output type, differential	3.2 V bias
Output impedance, max	100 Ω
Pressure range:	
Operational, max	800 psi
Absolute max	1,200 psi
Operating temperature	-10° to $+60^\circ\text{C}$
Diameter	0.80 in.
Length	3.37 in.
Buoyancy in water	-68%
Weight, without cables	43 grams
Cable¹	6 cables, 15 ft. each
External material	polyurethane

Notes: ¹ Cable: twisted, shielded pair, polyurethane jacket.

Options: Connector; cable length



Key features

- Three orthogonal axis accelerometers and one omnidirectional hydrophone
- Four channel combination provides an approximately 4.8 dB improvement in signal to noise ratio
- Pitch and roll, heading, temperature, health check
- Pre-amplifier and differential output
- Micro-controller with digital link
- Power management capability
- Manufactured in ISO 9001 facility

Pin out		
Cable	Lead color	Function
X	white black shield	X SIG + X SIG - X SHIELD
Y	white black shield	Y SIG + Y SIG - Y SHIELD
Z	white black shield	Z SIG + Z SIG - Z SHIELD
H	white black shield	H SIG + H SIG - H SHIELD
DIG	white black shield	DIG + (Clock) DIG - (Data) DIG SHIELD
PWR	white black shield	PWR + PWR - PWR SHIELD

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