

## PRODUCT DATA SHEET

### R50-UC Sensor Underwater Sensor

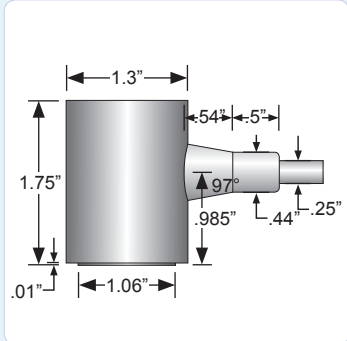


#### DESCRIPTION AND FEATURES

R50-UC is an underwater sensor with integrated preamplifier. The integrated electronics give the sensor a signal-to-drive capability for depths of 300 meters (1000 ft) or more. The sensors feature special polymer coatings making it 100% insulated and non conductive with an integral waterproof cable for underwater use. The sensor is tested to depths of 1000 psi.

#### APPLICATIONS

The sensor can be used for the structural health monitoring of submerged structures like offshore oil and gas platforms, ships etc. They can be used inside any liquid filled platforms like pipelines, chemical tanks or any other submerged structures.



#### OPERATING SPECIFICATIONS

##### Dynamic

Peak Sensitivity, Ref 1V/(m/s).....	46 dB
Peak Sensitivity, Ref 1V/ $\mu$ bar.....	-68 dB
Operating Frequency Range.....	300-550 KHz
Resonant Frequency, Ref 1V/(m/s).....	300 dB
Resonant Frequency, Ref 1V/ $\mu$ bar.....	500 KHz
Directionality.....	+/- 1.5 dB

##### Environmental

Temperature Range.....	-65 to 177°C
Shock Limit.....	500 g

##### Physical

Dimensions*.....	1.3"OD X 1.75"H
.....	33.0 mm OD X 44.4 mm H
Weight.....	180 grams
Case Material.....	Stainless Steel/Epoxy
Face Material.....	Ceramic
Connector.....	BNC on integral cable
Connector Locations.....	Side

##### Electrical

Shielding for EMI.....	Fully shielded
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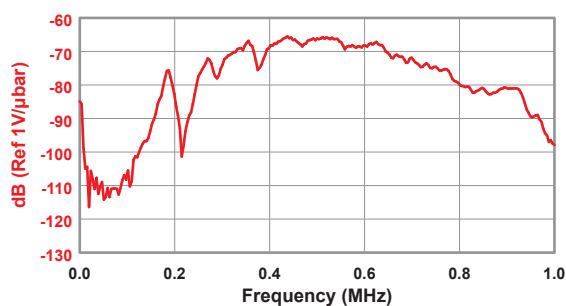
#### ORDERING INFORMATION AND ACCESSORIES

R50-UC.....	R50-UC
Cable (specify length in 'XX' m at end of PN).....	1234-X
Pre-amplifier.....	0/2/4, 2/4/6, 1L-LP-50S

##### Sensors include

Characterization Certificate & Warranty

\* Due to variances in coating process, the height of coated sensors may vary within a tolerance of +/- 0.015 inches (.381 mm)



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