

Wideband Omni-Directional Passive Surveillance Sonobuoy (LOFAR)

SSQ-906G&H



Key features

- High performance omni-directional buoy for littoral and deep water operation
- Passive surveillance
- 'G' size
- Wideband acoustic frequency range
- Acoustic monitoring of marine mammals and maritime noise pollution
- Autonomous Function Select
- Coastal surveillance option

Overview

The Ultra Maritime SSQ-906G variant Low Frequency Analysis and Recording (LOFAR) sonobuoy combines a high-performance, wide frequency band omni-directional sensor with the proven in-buoy digital electronics of the Ultra Maritime SSQ-955 HIDAR sonobuoy. This combination takes full advantage of digital signal processing to offer a buoy that outputs distortion-free acoustic data across a high dynamic range and with superb linearity across an extended acoustic spectrum.

The SSQ-906H variant is designed primarily for shallow water operations close to the shoreline, or in the fresh water run-off environment of river estuaries. This variant will cope with all salinity conditions from fresh water to 3.6% salinity by weight. Optional GPS telemetry can be included.

The SSQ-906G&H variants offer considerable benefits to maritime patrol aircraft, especially those with limited space and weight available. Its small, lightweight size is ideal for helicopter operations.

Technical Specification

Sonobuoy Characteristics

Description	Wide frequency band omni-directional passive sonobuoy		
Dimensions	'G' size Length:	419.1 mm (16.5 in)	
	Diameter:	123.825 mm (4.875 in)	
	Weight:	5.6 kg (12.3 lbs)	
Deployment	Platform speed:	50 kts to 375 kts	
	Platform altitude:	46 m to 9200 m (150 ft to 30,000 ft)	
Operating Depth	AFS programmable settings:		
	SSQ 906G	30 m	140 m 300 m
	SSQ 906H	15 m	30 m 60 m
	Time to full stabilisation	100 s	180 s 240 s
Operating Life	AFS programmable 1 to 7 hours in 1 hour increments (Automatic Scuttle)		
RF Channel	AFS Programmable Channels 1 to 99 (136 MHz to 173.5 MHz, 375 kHz spacing)		
Telemetry Mode	Frequency Modulation Analogue		
VHF Radiated RF Power	1 Watt nominal		
Acoustic Frequency Range	10 Hz to 20 kHz		
FM Deviation Acoustic Sensitivity	116 dB \pm 2 dB re 1 μ Pa produces 19 kHz peak deviation at 100 Hz		
Variants	SSQ 906G: High performance, omni-directional SSQ 906H: Shallow water, low salinity variant		
Temperature Range	Seawater operating:	- 2°C to + 35°C	
	Un-packaged non-operating:	- 20°C to + 55°C	
	Packaged:	- 50°C to + 70°C	
Seawater Salinity (Optional SSQ 906H)	1.5% to 3.6% by weight		
	0.0% to 3.6% by weight		
Storage Life	Packaged:	7 Years	
	Un-packaged:	90 Days	

