



01

Passive Directional

The AN/SSQ-53H is a NATO A-size sonobuoy manufactured for the U.S. Navy to exact specifications. This digital, multi-functional buoy design combines passive directional capability with a calibrated wide band omni and maintains the traditional analog telemetry data for use with current platforms that utilize previous generation buoys.

This sonobuoy features both Electronic Function Select (EFS) for use prior to loading and launching and Command Function Select (CFS) to allow the operator to modify the sonobuoy's modes of operation after it has been deployed in the water.

Why Twenty-Six Defense Maritime

Twenty-Six Defense Maritime, a Twenty-Six Defense company, is a world leader in the design, development, testing and production of complex electromechanical systems and sensors, including Sparton sonobuoys. The company delivers a variety of sensing and advanced analytics capabilities that enable our nation to dominate the maritime domain.

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Key Features

- 27-305 meters (90 to 1000 ft)
- 97-channel RF Transmitter
- Acoustic Sensors (CSO, CO, XCO, DIFAR)

03

Enhanced Features

- Clear Audio (improved acoustic fidelity)
- Improved RF performance with Spur Free High Dynamic Range, Carrier Deviation Fidelity and Spectral Power Control
- CSO (Constant Shallow Omni) with reduced G-sensitivity at a depth of 45 ft (13.7m)
- Floating-point acoustic processing with Improved performance and highly accurate data
- High Dynamic Range creating enhanced performance in high ambient noise environments or for use with multi-static active sources.
- GPS capable and upon activation provides location reporting.
- Calibrated Omni (CO) co-located with the DIFAR sensor to provide acoustic information at the selected depth at two bandwidths: 20kHz (CO) or 40kHz (XCO)
- LiFeS2 Battery – reliable, safe and fully certified
- Multiple launch options: fixed-wing, rotary-wing aircraft and surface vessels
- Temperature and depth sensing
- EFS (Electronic Function Select)
- Configurable
- CFS (Command Function Select) Commandable – RF Channel, Life, Sensor, AGC Level



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Physical Characteristics

Weight	8.98 kg (19.8 lbs)
Sonobuoy Launch Container	LAU-126/A

Performance Data

RF Command Receiver	UHF – Single Channel
RF Transmitter Power Output	1 W minimum
RF Transmitter Operating Frequency	97 Channel Selectable
Sensors/Audio Frequencies	CSO CO DIFAR XCO
Sensor Temperature Range	3 to 45°C (±1°C)
Depth Sensor	1000 ft (± 23 ft)
Operating Depth	27-305 meters (90-1000 ft)
EFS Selection	RF, Life, Depth, Sensor, and AGC
Launch Altitude	12 to 9144 meters (40 to 30000 ft)
Launch Speed	0 to 370 KIAS
Shelf Life	5 years in sealed container