

# AN/SSQ-53G(GPS) DIFAR Sonobuoy

## Directional Frequency Analysis Recorder



### Key features

- Highly accurate directional sensitivity
- High power 97-channel RF transmitter
- Li/FeS<sub>2</sub> power source
- GPS support
- 21 lbs / 9.5 kg
- Field programmable
- CFS commandable
- Air launchable from fixed or rotary-wing aircraft

### Overview

The AN/SSQ-53G(GPS) DIFAR US Navy A-size sonobuoy combines a passive directional and calibrated wide-band omni capability into a single multi-functional sonobuoy. This is the recommended DIFAR sonobuoy for international customers requiring GPS capability.

The AN/SSQ-53G(GPS) can operate in four acoustic sensor modes selectable via EFS or CFS. A Constant Shallow Omni (CSO) provides acoustic information at a fixed depth of 45 ft (13.7 m) while a Calibrated Omni (CO) co-located with the DIFAR sensor provides acoustic information at a selectable operational depth. The Calibrated Omni sensor can operate with acoustic bandwidths of 20 KHz (CO) or 40 KHz (XCO).

The AN/SSQ-53G(GPS) has GPS location reporting capabilities following activation to transmit NMEA formatted messages.

The AN/SSQ-53G(GPS) DIFAR is air launchable from fixed or rotarywing aircraft, or it can be deployed from the deck of a surface vessel. Descent of the sonobuoy is stabilized and slowed by a parachute.

# Technical Specification

## Physical Description

Weight	21 lbs / 9.5 kg
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 (136.000 to 173.500 MHz)
RF Transmitter Stability	+/- 25 kHz
Frequency Response	<b>Selectable</b> CSO: (30 - 5000 Hz) CO: (5 - 20 kHz) XCO: (5 - 40 kHz) DIFAR: (5 - 2400 Hz)
Operating Life	0.5, 1.0, 2.0, 4.0, or 8.0 hours
Operating Depth	<b>Selectable</b> D1: 90 ft / 27 meters D2: 200 ft / 61 meters D3: 400 ft / 122 meters D4: 1000 ft / 305 meters
EFS Selections	RF Channel, Life, Depth Sensor, AGC Level
CFS Selections	RF, Life, Sensor, AGC, GPS, UHF
Launch Altitude	40 to 30,000 ft / 12 to 9144 meters
Launch Speed	0 to 370 KIAS
Shelf Life	5 years in sealed container
NSN	5845-01-663-0428
CAGE Code	1JGV5



**Ultra Maritime**  
sonobuoys@umaritime.com  
umaritime.com