AN/SSQ-62F (GPS) DICASS Sonobuoy

Active Directional with ASCII NMEA GPS

The AN/SSQ-62F (GPS) is a sixth-generation, Directional Command Active Sonobuoy System (DICASS) sonobuoy used for detecting and localizing submarines in preparation for attack. **This is the recommended DICASS Sonobuoy for international customers requiring GPS capability.**

The DICASS is capable of providing both range and bearing to the target for accurate position fixing. Like the AN/SSQ-62E, the AN/SSQ-62F (GPS) sonobuoy is capable of supporting any of the four acoustic frequencies as selected via the Electronic Function Select.

The AN/SSQ-62F (GPS) also incorporates Command Function Select, which permits the operator to modify the sonobuoy’s mode of operation even after it has been deployed. The AN/SSQ-62F utilizes a standard Lithium Sulphur Dioxide battery pack.

The AN/SSQ-62F (GPS) has GPS location reporting capabilities following activation to transmit NMEA formatted messages. The Sonobuoy transmits the GPS messages RMC, GSV, GGA, and GSA at an update rate of five seconds on a subcarrier centered at 33.5 KHz.

The AN/SSQ-62F (GPS) is air launchable from fixed or rotary-wing aircraft or can be deployed from the deck of a surface vessel. The descent of the sonobuoy is stabilized and slowed by a parachute.

- All Digital Design
- High-power 97-channel RF Transmitter
- LiSO$_2$ power source
- CFS commandable
  - RF channel, additional depths, sonic frequency, etc.
- Compatible with all known airborne acoustic processors
PHYSICAL CHARACTERISTICS

- Weight: 15.9 kg (35 lbs)
- Sonobuoy Launch Container (SLC) Compatible: 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 Frequency Stability: ±25 kHz
- Multiplexed Composite consisting of Direct summation Directional Data (2 Channels) Suppressed carrier quadrature modulated on subcarriers
- Sonar: Selectable acoustic channel (1 of 4)
- Sonic Frequencies: A: 6.5 kHz, B: 7.5 kHz, C: 8.5 kHz, D: 9.5 kHz
- Operating Life: 1 hour minimum
- Operating Depth: D1: 15m, 46m, 92m (50’, 150’ or 300’)
  D2: 27m, 120m or 460m (90’, 400’, or 1500’)
  Commandable to 46m and 92m or 120m and 460m
- Transducer Array: Piezoelectric Ceramic Omni directional Transmit/Directional Receive
- Shelf Life: 5 years in sealed container
- Selections (Depth and RF Channel): Electronic Function Select
- Selections (Depth, Acoustic Channel, RF Channel): Command Function Select