UM SONOBUOYS

Multistatic Low Frequency Active Source & Moni Receive

AN/SSQ-565



Key features

- A-size LFA source sonobuoy with GPS
- ITAR-free Canadian design
- Designed for multistatic active missions
- Supports monostatic sonar operations
- Over 400Hz acoustic transmit bandwidth
- Continuous Active Sonar (CAS) mode
- Both US and UK GPS reporting modes
- CAD or gravity launch
- 4 selectable depths

Overview

The SSQ-565 sonobuoy operates primarily as a high-power, low frequency acoustic source for multistatic active sonar operations. Its transmit band is compatible with any standard sonobuoy, but is ideally matched with Ultra Maritime's SSQ-573.

The SSQ-565 also provides a standalone omnidirectional passive receive capability with automatic gain control (AGC) for monostatic active sonar operations.

The SSQ-565 incorporates a Command Signal Generator (CSG)/ Command Function Select (CFS)-compatible UHF downlink to control its operation after launch. It works with any aircraft capable of commanding any variant of the SSQ-62E DICASS sonobuoy.

Is this still true?

Technical Specification

SSQ-565 offers commandable ping types over a 400Hz bandwidth and the ability to operate at 4 different depths. The power source is a lithium sulfur dioxide battery pack with safety features to ensure voltage is not applied unless the buoy has been deployed into seawater. An on-board GPS receiver provides precise buoy position on the RF uplink. The SSQ-565 is air and sea-launchable.

Key benefits

- ITAR-free Canadian design
- 5 years shelf life in sealed container
- 90 days unpacked storage life
- Command Function Select (CFS)
- Command Signal Generator (CSG)
- GPS format: US and UK
- Commandable RF on/off and RF channel
- Depth changes after deployment
- Commandable scuttle
- Full control of 7 sonar channel & ping type
- CFS Ping Types: FM sweep, CW ping, shading, CAS (FM & CW)
- CSG Ping Types: CW, FM Sweep
- Ping control similar to DICASS SSQ-62

Is this valid?

Sonobuoy Characteristics

Description Multistatic Low Frequency Active Source & Omni Receive

Mechanical 'A' size Length: 914 mm (36.00 in) Characteristics

Diameter: 124 mm (4.875 in)

> 14.4 kg (31.8 lbs) C of G:

35.6 cm (15.25 in) from bottom end

Ballistic Coefficient: 78.42 kg/m²

Power Source Lithium Battery

Deployment Maximum Platform Speed: 370 kts

Mass:

Maximum Platform Altitude: 9,144 m (30,000 ft)

Temperature Range Storage Temperature: -40°C to +70°C

> Launch Air Temperature: -20°C to +55°C

Seawater Temperature: -2°C to +35°C

Operation Depth 4 depths across 2 depth families selected by EFS

> d1 (30, 60, 120 m), d2 (60, 120, 250 m) Go deeper commandable using CFS or CSG

Operating Life 8 hours fixed

Scuttles after 8 hours or after scuttle command

RF Channel EFS Programmable, 97 Channels

(136 MHz to 173.5 MHz, 375 kHz spacing)

VHF Radiated Power 1 Watt Nominal

Telemetry FM (conventional DIFAR format)

Acoustic Omni Receiver 1600 to 2000 Hz

Transmit Vertical 10 to 13° (3dB measured beamwidth)

Ping Capacity up to 200 ping seconds <7% duty cycle

CAS, CW, FM Up, FM Down **Ping Types**

