



SONOBUOY MISSION POD

SONOBUOY DISPENSER FOR MANNED AND UNMANNED PLATFORMS

Features

- Role-fit sonobuoy carriage and release system
- Carriage and deployment of G-Size and F-Size sonobuoys
- Ship or land based operator station
- MIL-STD-1760E compliant electrical interface
- MIL-STD-8591 mechanical interface using 14" standard bale lugs
- 28VDC Powered (MIL-STD-704)
- Optional conditioning and forced ejection for high altitude / high deployment speed operations
- Optional integrated receiver, processor, downlink transmitter and datalink

The Sonobuoy Mission Pod (SMP) provides an on-demand, role-fit sonobuoy dispenser and optional sonobuoy processing solution for fixed-wing and rotary-wing platforms. Designed for rapid front-line installation and removal, the SMP attaches to a MIL-STD-2088 weapon hard-point providing for multi-role operation of existing platforms in an Anti-Submarine Warfare (ASW) capacity.

The SMP removes the need to acquire and maintain a fleet of dedicated ASW platforms, providing for greater flexibility and agility with existing assets. Using a SMP to deploy a multi-static field allows for area clearance significantly quicker, to the same levels of confidence, than can be achieved using dipping sonar.

Available in carriage variants ranging from 25 to 63 sonobuoys, the SMP can be sized to match the payload capacity of small and large platforms. For high altitude / speed operations of the sonobuoys, the SMP is also available providing for deployment at a ceiling height of 30,000 feet (9,144m) and 350kts.

Multiple SMPs can be installed to a single platform to extend the total carriage capacity.

Supported sonobuoys include:

- SSQ-955 HIDAR series
- SSQ-906 LOFAR
- SSQ-937D Bathy
- SSQ-92X G-ALFEA
- SSQ-95X Mini-HIDAR



Both dispenser and standalone SMP configurations are available;

- Standalone Pods accommodate all necessary electronics for communication and processing of the sonobuoys whilst relaying data to a remote Control Station. These Pods have no service demands on the host platform other than provision of power and release consent.
- Dispenser Pods can either be utilised in conjunction with Standalone Pods, in order to increase total sonobuoy carriage, or in conjunction with the required electronics hosted inside the platform's internal avionics bay. Dispenser Pods utilise a MIL-STD-1760 data exchange to interface with the host platform.

The SMP is able to dispense both G-Size and F-Size sonobuoys, and is able to programme sonobuoys fitted with a Remote Function Select (RFS) interface for depth, channel, mode and life settings whilst in-flight (non-RFS sonobuoys are supported when manually programmed prior to load-out).

In order to increase operating range and provide a low-latency operator interface, the Sonobuoy Mission Pod performs sonobuoy processing internally and transmits visual display data to the Control Station. A Sonobuoy Receiver and a Command Function Transmit unit provide for bi-direction reception and control of deployed sonobuoys.

A remote Control Station is provisioned for sonar operators. Communication with the Sonobuoy Mission Pod is achieved via a data link, either line-of-sight or satellite-based for extended range missions. The data link between the Control Station and SMP relays all necessary sonobuoy acoustic information and buoy deployment commands. The Control Station may be sited on surface ships for naval operations or on land, in either fixed or mobile installations, allowing for colocation of sonar operators with operations staff.

Standard configurations

SMP-63

- Intended for large, manned fixed-wing or HALE UAS
- Sonobuoy conditioning
- Forced ejections
- 64-channel Sonobuoy Receiver / processing system (can be hosted in avionics bay)
- Data exchange via host platform's satellite communication system or line-of-sight data link

SMP-40

- Ideal for medium-sized, fixed-wing manned MPA or MALE UAS
- 32-channel Sonobuoy Receiver / processing system (can be hosted in avionics bay)
- Light-weight SWaP32 Sonobuoy Processor
- Data exchange via host platform's communication system or line-of-sight data link

SMP-25

- Suitable for manned or unmanned Rotary Wing and small Fixed Wing platforms
- 32-channel Sonobuoy Receiver / processing system (can be hosted in avionics bay)
- Light-weight SWaP32 Sonobuoy Processor
- Data exchange via line-of-sight data link integrated to SMP

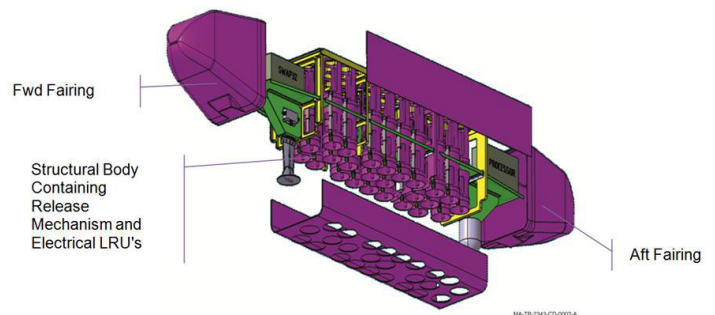
Relay-only

- Intended for 150-300kg Rotary Wing UAS
- Provides sonobuoy processing with data-link to Operator Station
- Designed for operation with a cooperating asset that performs sonobuoy deployment

Specifications

The following data relates to the SMP-25

Dimensions Width Height Length	0.508m 0.508m 2.3m (maximum extent) 1.7m (at base)
Weight (Dispenser Config) Unloaded MSA Mini-Buoy Load Passive Mini-Buoy Load Weight (Standalone Config)	80kg 187kg 167kg +27kg (Excl. weapon wing and stores release unit)
Communications (Standalone Config) VHF UHF Datalink (selectable band)	136MHz to 173MHz Sonobuoy Band 291.3MHz (UK) and 291.4MHz (CFS/STANAG 4718) L Band 1.71 to 1.85GHz S Band 2.2 to 2.50GHz C Band 4.40 to 4.94GHz, 5.25GHz to 5.85GHz
Operational profile Carriage ceiling Deployment ceiling Carriage speed Deployment speed Deployment rate	Up to 30,000ft Up to 30,000ft Up to 220kts Up to 150kts 1 every 2.5s (per pod)
Sonobuoys HIDAR Series LOFAR Series Bathythermal G-ALFEA Mini-HIDAR	SSQ-955, 955A, 955B, 955C SSQ-906G, 906H SSQ-937D SSQ-92X SSQ-95X



making a difference

Ultra Electronics
 COMMAND & SONAR SYSTEMS
 Knaves Beech Business Centre
 Loudwater
 High Wycombe
 Buckinghamshire HP10 9UT
 England
 Tel: +44 (0)1628 530000
 Fax: +44 (0)1628 538661
 www.ultra-css.com
 www.ultra-electronics.com

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