ULTRA

1/2 ATR Software Defined Sonobuoy Receiver (SDSR)

Lightweight receiver designed for rotary-wing aircraft

Key features

- 32 acoustic channels
- Dynamic range of >100 dB
- Supports future sonobuoy formats
- GPS buoy support
- Digital data rates to 320 kbps
- Automatic Identification System (AIS)
- Field programmable / upgradeable

Overview

The 1/2 ATR Software Defined Sonobuoy Receiver (SDSR) system is a highly sensitive ruggedized VHF signal reciever. This receiver system is designed to meet environmental requirements for rotary-wing ASW platforms. The system is capable of receiving any mix of passive and active sonobuoy VHF signals concurrently for up to 32 independently selectable RF channels.

The Flightline SDSR supports all current NATO sonobuoy formats including GPS buoys. Another key feature of the 1/2 ATR sonobuoy reciever is it's lightweight. The receiver system itself weighs approximately 30 lbs while the preamplifier unit only weighs 4 lbs. This proven receiver system is also designed to withstand the harsh weather conditions typically experienced in low-altitude sea-going conditions.

1/2 ATR Sonobuoy Receiver Specifications

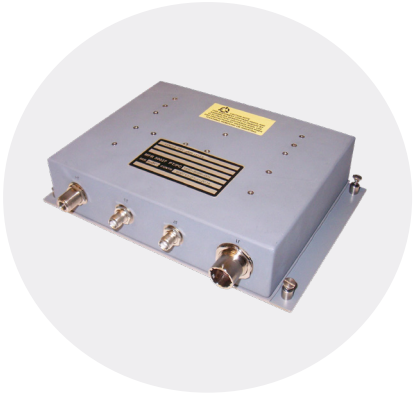
Ordering Information

6120-0500-001 —— 1/2 ATR SDSR

Mission Critical Accessories

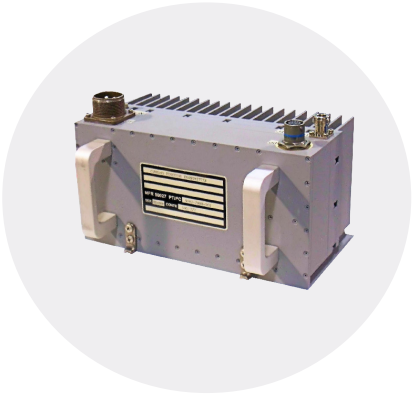
Single External Preamplifier (SEP)

Part No. 6120-8000-001



Command Function Transmitter (CFT)

Part No. 5982-7000-002



Performance

Channels	32 acoustic channels
Dynamic Range	>100 dB
FM Sensitivity	12 dB at -113 dBm (25 kHz bandwidth)
Digital Data Rate	Multiple / Selectable (At time of order)
Audio Distortion	≤ 0.2% at 100 Hz >140 dB out-of-band rejection
Frequency Response	Flat within 1 dB (0.5 Hz - 20 kHz)
Antenna Support	1

Physical Specifications

General Physical Description	1/2 ATR
Dimensions - Receiver	8.25H x 8.60W x 16.20D (in) 20.96H x 21.84W x 41.15D (cm)
Dimensions - Preamplifier	8.85H x 10.50W x 2.25D (in) 22.48H x 26.67W x 5.72D (cm)
Weight - Receiver	30 lbs / 13.61 kg
Weight - Preamplifier	4 lbs / 1.81 kg
Housing Color	Grey or Custom

Input & Control

Power Input	115 VAC 400 Hz Power
Control	Ethernet (Primary) - 1 Gbps 1553 Data Bus (SPS)

Environmental

Operating Temperature	-40°C to 55°C
Cooling Requirements	Self-cooled (Fan)
Operating Humidity	2% to 95% Non-condensing
Vibration	MIL-STD-810F Compliant
Shock	MIL-STD-810F Compliant
Safety Standard	MIL-STD-810F Compliant

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