

# 1 ATR Software Defined Sonobuoy Receiver (SDSR)

Versatile, Wide-Band Acoustic Receiver



## Key features

- Up to 100 acoustic channels
- Dynamic range of >100 dB
- Supports future sonobuoy formats
- GPS buoy support (NMEA & Binary)
- Digital data rates to 320 kbps
- Automatic Identification System (AIS)
- Sonobuoy Positioning System (SPS)

## Overview

The 1 ATR Software Defined Sonobuoy Receiver (SDSR) system is a highly sensitive ruggedized VHF signal receiver. This receiver system is designed to meet environmental requirements for advanced multi-mission aircraft (MMA). This SDSR is capable of receiving any mix of passive and active sonobuoy VHF signals concurrently for up to 100 independently selectable RF channels. Our SDSR supports all current NATO sonobuoy formats including GPS buoys. Another key feature of the 1 ATR sonobuoy receiver is the incorporation of Radio Frequency Interference Mitigation techniques. The Acoustic Receiver System can adaptively filter and spatially steer the antenna patterns to mitigate the effects of undesired VHF interference.

# Technical Specification

## Ordering Information

7519-0500-001	—	VIPR SDSR
7519-0500-010	—	
7520-0500-001	—	1ATR VPX

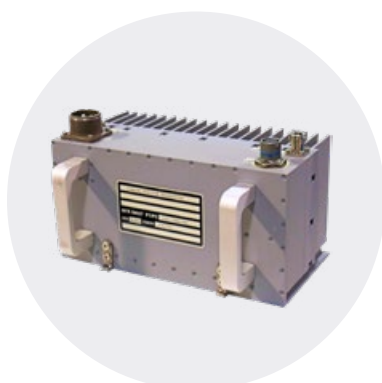


## Mission Critical Accessories

Quad External Preamplifier (QEP)  
Part No. 5798-8000-001



Command Function Transmitter (CFT)  
Part No. 5982-7000-002



## Specification Data

Performance	Up to 100 Channels
Channels	>100 dB
Dynamic Range	12 dB at -113 dBm (25 kHz bandwidth)
FM Sensitivity	Multiple / Selectable (At time of order)
Digital Data Rate	≤ 0.2% at 100 Hz
Audio Distortion	>140 dB out-of-band rejection
Frequency Response	Flat within 1 dB (0.5 Hz - 20 kHz)
Antenna Support	4
<b>Physical Specifications</b>	
General Physical Description	1 ATR
Dimensions - Receiver	10.60H x 11.54W x 17.84D (in) 26.93H x 29.31W x 45.31D (cm)
Dimensions - Preamplifier	8.81H x 10.50W x 5.60D (in) 22.38H x 26.67W x 14.23D (cm)
Weight - Receiver	55 lbs / 24.95 kg
Weight - Preamplifier	10 lbs / 4.54 kg
Housing Color	Grey or Custom
Input & Control	115 VAC 400 Hz Power
Power Input	Ethernet (Primary) - 1 Gbps
Control	1553 Data Bus (SPS)
<b>Environmental</b>	
Operating Temperature	0°C to 45°C
Cooling Requirements	Self-cooled (Fan)
Operating Humidity	6% to 95% Non-condensing
Vibration	MIL-STD-810F Compliant
Shock	MIL-STD-810F Compliant
Safety Standard	MIL-STD-810F Compliant



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