

AN/ARC-201D

SINCGARS Airborne Radio

The L3Harris AN/ARC-201D Single Channel Ground and Airborne Radio System (SINCGARS) System Improvement Program airborne radio is a reliable, field-proven voice and data battlespace communications system with networking capabilities.



The AN/ARC-201 is a tactical airborne radio subsystem that provides secure, anti-jam voice and data communication. The integration of COMSEC and the Data Rate Adapter (DRA) combines three Line Replaceable Units into one and reduces overall weight of the aircraft.

Additional features such as improved error correction, Enhanced Data Modes (EDMs) (including packet data), more flexible remote control and Global Positioning System (GPS) compatibility allow the L3Harris Airborne SINCGARS radio to assume a number of new roles supporting future digital battlefield requirements.

The AN/ARC-201 is backwards compatible with existing SINCGARS Data Modes. The EDMs of the radio employ a Reed-Solomon Forward Error Correction technique providing enhanced bit-error-rate performance. The EDM packet data mode supports packet data transfer from the airborne host computer to another airborne platform, or to the ground-based equivalent SINCGARS system. The radio is Enhanced System Improvement Program (ESIP) waveform compatible and provides voice and data packet retransmission capabilities as well as improved noisy channel avoidance for enhanced Frequency Hopping (FH) synchronization.



SECURE, ANTI-JAM AIRBORNE COMMUNICATIONS

KEY BENEFITS

- > Optimized SWaP
- Supports future digital battlefield requirements
- Compatible with existing SINCGARS Data Modes

TRANSMITTER	
Power Output	10 watts nominal
Harmonic Suppression	MIL-STD-461A
Transmitter Spurious Responses	100 dB
Frequency Deviation	± 6.5 kHz

RECEIVER Noise Figure 10 dB Image Rejection MIL-STD-461A IF Rejection 100 dB minimum

POWER	DWER	
Power Input	10 W radio	
Primary Power	28 VDC per MIL-STD-704 (<5 amps maximum)	
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PHYSICAL

	Dimensions	4.1 H x 5.5 W x 11.6 D in (10.4 H x 14 W x 29.4 D cm)
	Weight	5.5 lbs (2.49 kg)

TECHNICAL FEATURES

Jam-resistant communications

Voice and data

Automatic retransmit

Built-in amplitude homing

Integrated COMSEC

Integrated DRA functions:

- TACFIRE and SINCGARS data modes: 600, 1200, 2400, 4800, 16,000 bps
- Enhanced packet data modes: 1200, 2400, 4800, 9600, RS-232
- Packet EDM mode is 16 kbps (only RS-423)
- 1553B bus provides radio control and GPS data input/output

Built-in test

AM-7189A/ARC-compatible

Six FH presets (including TRANSEC keys)

Six single channel presets plus manual and cue channels

Voice and data retransmit in packet

Improved noisy channel avoidance to enhance FH synchronization

ESIP waveform compatible

Situational Awareness

Replaces bus radio (RT-1478), DRA (CV-3885) and external COMSEC

MIL-STD-1553B compatible

Provides 1553B control of AM-7189A/ARC 40 W amplifier

INTERFACES

Interfaces with the following avionics equipment

• ID-1351A homing meter • C-16111, C-6533, C-10414 intercoms • AM-7189A/ARC 40 W power amplifier

FUNCTION

30-88 MHz VHF-FM

2,320 channels

See L3Harris Product Catalog for accessories



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