

ADVANCED COMMUNICATION SYSTEM

- ACS 235





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For critical flight regimes, HAL's V/UHF Tactical Airborne Transceivers provides today's flight crews with dependable, highly accurate air to air and air to ground communication.

ACS-235, lightweight airborne V/UHF Tactical Airborne Transceiver is a highly versatile, all solid-state, digital, high frequency radio communication system intended for both fixed- and rotary-wing airborne applications.

Advanced features include digital signal processing (DSP) technology to provide new embedded features in an exceptionally lightweight, compact system. Control options for the system provide MIL-STD-1553B. Extensive built-in test equipment (BITE) is utilized for diagnostic testing and monitoring.

Built on a strong foundation of quality, ACS-235 provides users with tactical advantages and lower life cycle costs.

HAL has over 30 years' experience in airborne communication system design and our systems are successfully proven on various aircrafts like SU-30, MIG-29UPG, MIG-29K/KUB, IJT, MIG- 21UPG (BISON), JAGUAR/DARIN-III, ALH, MIG27 etc.

Combination of our rich experience with latest digital technology makes HAL ACS 235 Radio the affordable choice for users.

Key Features

- ✧ Multi-mode, multi-band, V/UHF Airborne Transceiver
- ✧ Direct sequence spread spectrum for LPI
- ✧ Good co-location for multiple radio installations
- ✧ Emergency guard receiver for 40.5, 121.5, 156.8 and 243 MHz
- ✧ FH for TRANSEC
- ✧ Encryption for COMSEC



ACS-235



RAM 2700A



VOR/ILS



IFFT 2410A



TACAN



DACS



ADU

General Characteristics

Frequency Range	30 - 407 MHz
Channel Spacing	8.33 kHz; 12.5 kHz; 25kHz
Modulation Formats	AM, FM, FSK, OQPSK
Power supply	28V DC Nominal
Control	MIL-STD-1553B
MAIN RECEIVER	
Sensitivity (10dB Sinad)	< -107 dBm (FM 3kHz modulation)
	< -105 dBm (AM 30% modulation)
IF / Image Rejection>	80 dB
GUARD RECEIVER	
Frequencies	40.5 MHz, 121.5 MHz 156.8 MHz, and 243 MHz
Sensitivity	< -101 dBm (FM), < -101dBm (AM)

TRANSMITTER	
RF Output Power	10W (AM), 32.4W (PEP AM) 15W (FM)
Harmonics	< -60 dBc
Spurious emissions	< -80 dBc
ENVIRONMENTAL	
Operating Temperature	-40 to + 71 °C
Vibration, Shock	MIL-STD-810F
Supply variations	MIL-STD-704E
EMC	MIL-STD 461C
Altitude	18Kms
PHYSICAL	
Size (D x H x W) mm	318 x 195 x 124 (½ ATR Short)
Weight	< 8kg
PLATFORMS	Advanced Light Helicopter (Dhruv), Chetak

NOTE: Specifications are subject to change without notice, Consult Manufacturer for latest specifications



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