HF-9000D High Frequency Radio

Lightweight, airborne communications system for a variety of applications.

The Rockwell Collins HF-9000D lightweight airborne HF radio 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 for manual control, RS-232 and MIL-STD-1553B. Extensive built-in test equipment (BITE) is utilized for diagnostic testing and monitoring.

Built on a strong foundation of quality, long-range HF radios, the HF-9000D provides users with tactical advantages and lower life cycle costs. Its powerful 200-watt PEP operation enables effective long-range communication and its family of antenna couplers is designed to effectively match all standard airborne antennas, providing maximum range and outstanding talk power.

KEY BENEFITS
- The HF-9000 family is exportable worldwide
- Automatic link establishment offers best clear-channel selection
- Digital signal processing
- Global range and 200 watts of power assure continuous tactical communication
- Embedded data modem
- Upgradable to meet future requirements
PRODUCT HIGHLIGHTS

- 2.0000 to 29.9999 MHz frequency range
- Operates in USB/LSB/AME voice or USB/LSB/ISB data and continuous wave (CW)
- 6 pre-programmed emergency channels
- 36 user-programmable channels
- 249 maritime preset channels
- 200 W PEP, 100 W average, operator selectable for 50 and 10 W PEP and average
- Rapid tune antenna coupler
- Embedded MIL-STD-188-141B automatic link establishment (ALE) with link protection
- Embedded MIL-STD-188-110B data modem (data rates up to 19.2 kbps)
- MIL-STD-188-203-1A (enhanced data) operation
- Link 11 compatible
- Embedded ARINC 714-6 SELCAL decoding
- Fiber optic interconnect

Note: Retrofit packages to replace most existing airborne HF systems, including Rockwell Collins 718U-5, 618T and 628T systems, can be made available.

SPECIFICATIONS

**Modes**
- USB and LSB voice and data, ISB data, CW and AME voice

**Audio input/output**

**Transmit input**
- Voice: -10 to +10 dBm, 150 or 600 ohm balanced
- Carbon mic: 0.25 V rms, 82 ohm, bias voltage provided
- Data: 0 dBm, 150 or 600 ohm balanced

**Receive output**
- Voice: +20 dBm (100 mW), 150 or 600 ohm balanced, adjustable volume control
- Data: 1 mW (0 dBm), 150 or 600 ohm balanced
- SELCAL: 1 mW (0 dBm), 600 ohm per ARINC 714-6
- Modem data: RS-423/MIL-STD-188-114B

**Power requirements**
- R/T: +28 V dc per MIL-STD-704E
- Control: +28 V dc per DO-160B
- Coupler: +28 V dc per DO-160B

**HF-9087D R/T power consumption**
- Receive: 110 W max
- Transmit: 530 W max

**Environmental**

- HF-9087D R/T
  - Temperature: -40°C to +55°C
  - Altitude: 16,764 m (55,000 ft)
  - Humidity: 95%

- Shock
  - Operational: 6 g
  - Crash safety: 15 G

- Vibration
  - Tested for use in piston or turbine, fixed-wing and rotary-wing aircraft

- Environmental
  - MIL-STD-810E

- EMI
  - MIL-STD-461D

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

Building trust every day.

Rockwell Collins delivers smart communication and aviation electronic solutions to customers worldwide. Backed by a global network of service and support, we stand committed to putting technology and practical innovation to work for you whenever and wherever you need us. In this way, working together, we build trust. Every day.

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