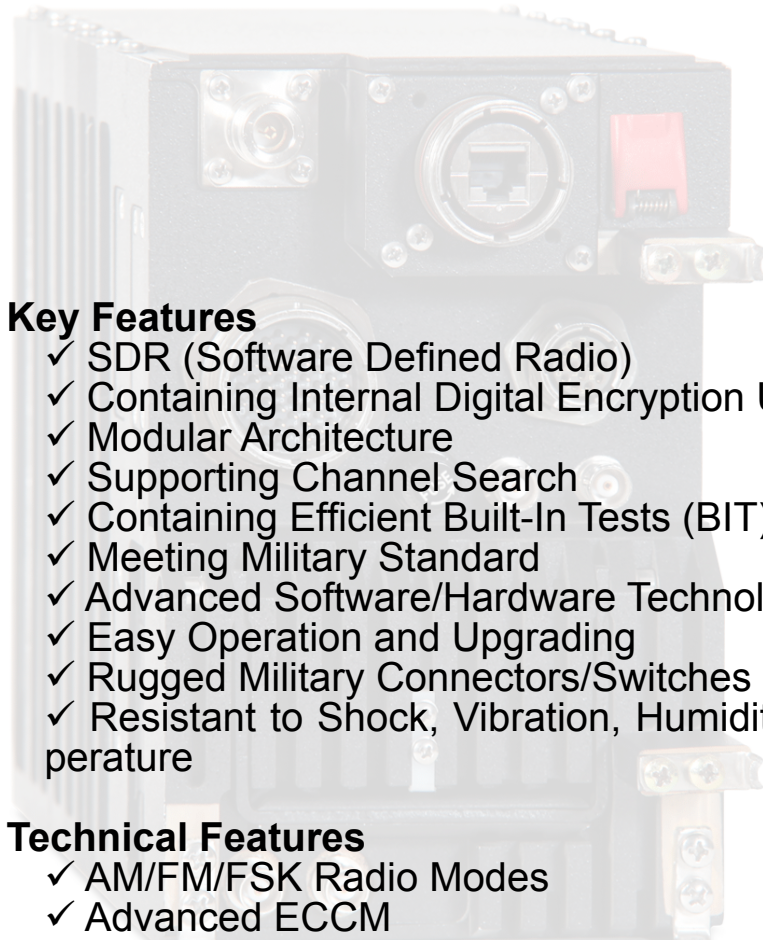




ARC-620/E

VHF/UHF Airborne Radio Communication System

ARC-620/E is a VHF/UHF airborne Software Defined Radio that can be installed in a wide range of planes such as fighters, cargos, and also helicopters. In accordance with the plane type, there are several different remote control systems can be installed in the cockpit to perform control commands remotely.



Key Features

- ✓ SDR (Software Defined Radio)
- ✓ Containing Internal Digital Encryption Unit
- ✓ Modular Architecture
- ✓ Supporting Channel Search
- ✓ Containing Efficient Built-In Tests (BIT)
- ✓ Meeting Military Standard
- ✓ Advanced Software/Hardware Technology
- ✓ Easy Operation and Upgrading
- ✓ Rugged Military Connectors/Switches
- ✓ Resistant to Shock, Vibration, Humidity, High Temperature and Low Temperature

Technical Features

- ✓ AM/FM/FSK Radio Modes
- ✓ Advanced ECCM
- ✓ Independent Guard Receiver at 121.5 MHz and 243 MHz
- ✓ Data Transmission (Up to 28,800 bps)
- ✓ EMR (Emergency Mode)
- ✓ High Voltage/Reverse Polarity/High VSWR Protection



General specifications

Frequency range.....	VHF: 118~173.975 MHz/UHF: 225~399.975 MHz
Channel spacing.....	25KHz,12.5KHz,8.33KHz
Number of preset channels.....	150
Power supply.....	DC supply: 28VDC
Power Consumption.....	approx. 50W (receive mode,DC) approx. 225W (transmit mode,DC)
Radio Modes.....	AM: A3E standard/FM: F3E standard/FSK
ECCM capability.....	FHSS (Frequency Hopping Spread Spectrum)
Guard receiver.....	121.5MHz,243MHz
Radio control interface.....	RS422, 10/100 Ethernet (RJ45 connector)
Radio data interface.....	RS232
Data rate.....	Up to 28,800 bps

Transmitting specifications

Output power.....	AM carrier power: 20W ± 1dB FM: 20W ± 1dB ECCM: 100W ± 1dB (pulse)
AM Modulation factor.....	at least 80%
FM frequency deviation.....	±5.0KHz in 25KHz channel spacing ±2.5KHz in 12.5KHz channel spacing
Modulation distortion.....	maximum 5%
Harmonic suppression.....	≥ 55dBc
Non-harmonic spurious suppression.....	≥ 80dBc
AF input.....	100mV to 600mVrms into 150 Ω ±10%
AF response.....	300 to 3400Hz

Receiving specifications

Receiving sensitivity.....	AM: -103dBm for 10dB SINAD FM: -108dBm for 10dB SINAD
Selectivity.....	WIDEBAND: ≥ 60dB/±25KHz NARROWBAND: ≥ 40dB/±8.33KHz
Squelch sensitivity.....	setting the squelch on/off points in 5~25 dB output SINAD
Image rejection.....	-80dB
IF rejection.....	-80dB
AF output.....	Differential: 400mVrms into 600 Ω balanced Local: 5.6Vrms into 150 Ω
AF response.....	300 to 3400Hz
Audio distortion.....	maximum 5%
Receiver input protection.....	+30dBm input

Physical/Environmental Specifications

Dimension of the R/T unit.....	maximum 280×193×124 mm
Weight of the R/T unit.....	maximum 6.5kg
Dimension of the remote control unit.....	maximum 146×96×107 mm
Weight of the remote control unit.....	maximum 0.9kg
Operating temperature.....	-40°C ~ +65°C
Environmental standard.....	MIL-STD-810F
EMC standard.....	MIL-STD-461F