

ARC-620/E Airborne Radio Communication System

DESCRIPTION

New generation of airborne radios are designed based on the SDR (Software Defined Radio) technology. Benefiting from the technology an appropriate infrastructure is provided for data transmission and establishing data link networks as well as improving technical specifications and stability in comparison with the old radios. ARC-620 is a VHF/UHF airborne Software Defined Radio in a way that it can be substituted with the ARC-1400 old radio properly. This radio can be installed inside various jetfighters, cargos, and helicopters. Proportionate to the plane, there are several different remote control systems installed inside the cockpit to

perform control commands remotely.





| General specifications | |
|-----------------------------|---|
| Frequency range | UHF: 225-399.975MHz, VHF: 108-173.975MHz |
| Channel spacing | 8.33KHz/12.5KHz/25KHz |
| Modulation type | AM:A3E, FM:F3E, ECCM:FSK |
| Data transmission | 16kbps rate in the ECCM mode |
| Transmitting specifications | |
| Output power | AM and FM modes: 20W ± 1dB |
| | ECCM mode: 100W peak ± 1dB |
| Input audio | Local: |
| | Unbalanced with 150 Ω impedance and |
| | -35dBm to +10dBm power with |
| | capability of microphone bias |
| | Line: |
| | Balanced with 600Ω impedance and |
| | -15dBm to +10dBm dynamic range |
| Modulation factor | AM mode: at least 80% |
| | FM mode: ±5KHz frequency deviation in 25KHz |
| | channel spacing ±2.5KHz frequency deviation |
| | in 12.5KHz channel spacing |
| Modulation distortion | maximum 5% |
| | in environmental test condition: |
| | maximum up to 10% |