

ARTCOM | 4700R SK2-A

VHF MOBILE RADIO REPEATER

#MilitaryCommunication



aselsan

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ARTCom 4700R SK2-A VHF Mobile Radio Repeater is particularly used in unmanned aerial vehicles (UAV) that enables to repeat voice and data by converting it to baseband without decrypting the information. The repeater regenerates digital voice and data with error detection and correction algorithms to ensure clear voice and data communication.

General Features

- Compact design
- With synthesizer and microprocessor control
- Adjustable output power
- Continuous operability
- Information and error/alarm indicators
- ASELSAN-specific SK2 encrypted and APCO25 waveform support
- Compatible with SK2: ETSI 300 086 (Analog) & ETSI 300 113 (Digital) standards
- Compatible with APCO25: TIA-603-C (Analog) & TIA-102. CAAB-B (Digital) standards

Quantitative Features

- Repeating the signal by converting to baseband without decoding the crypto
- Reproduction of data in digital communication
- Clear and open digital voice communication
- Digital modulation: GMSK modulation channel selection with mechanical switch over device

General Technical Features

- Frequency range : VHF 146-174 MHz (full band)
- Channel spacing : 12.5 /25 kHz
- Channel number : 99 (preset)
- Rf output power : 5 W
- Modulation type : Analog FM, GMSK(SK2), C4FM(APCO25)
- RF input-output impedance : 50 Ohm
- Operating mode : Continuous
- Operating voltage : 13.6 V DC \pm 20%
- Operating current: Waiting : \leq 0.5 A /
Receive-transmit : \leq 3.5 A
- Receive-transmit : -30°C ~ +60°C
- Storage temperature : -40°C ~ +85°C
- Humidity : 95% Relative humidity at 500°C
- Dimensions (HxWxD) : 75x300x185 mm (except
duplexer and accessories)
- Weight : \leq 2.5 kg (Except Duplexer and
accessories)
- RF port quantity : 2 (Rx, Tx)

Features Of Receiver

- Sensitivity for 12 dB SINAD : -117 dBm
- Co-channel suppression bandwidth : \geq 85 dB (25 kHz channel)
 \geq 63 dB (12.5 kHz channel)
- Intermodulation suppression : \geq 70 dB (ETSI)
 \geq 80 dB (TIA)
- Spurious suppression : \geq 90 dB
- Noise ratio : \geq 48 dB (25 kHz channel)
 \geq 42 dB (12.5 kHz channel)
- Audio output power : 100 mW / 8 Ω
- Audio distortion : \leq % 3

Features Of Transmitter

- RF output power : 5 W
- Sensitivity for 12 dB SINAD : -117 dBm
- Unwanted emissions : \leq -70 dB
- Audio frequency response : +1, -3 dB
- Noise ratio : \geq 52 dB (25 kHz channel)
 \geq 46 dB (12.5 kHz channel)
- Audio distortion : \leq % 1

General Technical Features Of Duplexer

- Frequency range : 136-174 MHz
- Suppression : $>$ 70 dB (nominal)
- Insertion loss : $<$ 2 dB (nominal)
- Receive-transmit frequency separation : $>$ 4 MHz
- RF port quantity : 3 (antenna, high, low)

Specifications are subject to change without any notice. | All tolerances are within \pm 10%.