# UVR (UHF/VHF Radio)

# Analog and Digital Datalink Solution

### for Voice and Data

## **UHF/VHF Radio**

#### Description

The UHF/VHF Radio (UVR) is an advanced analog/digital data link system that has been specifically designed for manned and unmanned platforms to handle both audio and data transmission. The UVR's open architecture enables transmitting audio and Ethernet signals. The UVR is an affordable system that is modular, light-weight, reliable, and relatively small. It combines the commercially proven technologies and standards with advanced algorithms, to provide high excellent reliability and high performance.

The UVR systems family is a range of radio-communications equipment and systems designed for military environment, but not limited to military applications. UVR development was based on the experience and know-how gained by Commtact over many years of activity in the field of airborne radio communications.

The UVR systems family has been developed to provide the wide range of functional options, in order to meet diverfied operational requirements. The solution consists of a multi-band, multi-mode transceiver, providing aircraft with clear/secure voice/data communications facilities over an extended frequency range.

#### **Key Features**

- Long range
- Variable data rates
- Optimized bandwidths for different data rates
- Remote frequency change capability
- Full duplex (UPL&DNL)
- High reliability and low cycle cost
- Extended frequency band, 30 to 500 MHz, covering tactical and non-tactical communications, in AM and FM, in a single radio unit
- Options for preset channel and guard frequencies available
- ECCM capability by frequency hopping
- Enables BIT function
- Compact size and low weight
- Low power consumption

#### Applications

- Airborne Traffic Control (ATC)
- UHF/VHF Radio (UVR) for maritime applications
- UHF/VHF Radio (UVR) for ground applications
- UHF/VHF Radio (UVR) for Air to Ground forces voice & data communication
- UHF/VHF Radio (UVR) for Ground to Ground low & high data rate communication

### Specifications

Parameter	Value/Description
Frequency Band	30~500MHz
Modulation Type	FM, FSK, GMSK, AM (Optional)
Modes of Operation FM	FM Analog Voice, Low Rate FSK
Low Rate FSK Raw Data Rate	16Kbps
High Data Rate	250Kbps
TRANSEC	Supported (Optional)
COMSEC	Supported (Optional)
Transmission Power	Up to 20W
FM Voice Receiver Sensitivity	-115dBm @ 12dB SINAD
High Rate Data Sensitivity	-110dBm
Power Supply	18VDC~36VDC
Power Consumption	100W
Operational Temperature	-32 C to +55 C
Storage Temperature	-40 C to +70 C
Environmental Conditions	MIL STD 810F
	MIL STD 461E

#### Interfaces

- Ethernet100 BASE-T for IP-based data sources (2)
- RS-422 / RS-232
- Audio In/Out
- Discrete I/O