# URC-200 (V2) Uninterruptible Emergency Transceiver System



URC-200 (V2) Line-of-Sight Transceiver with AC or DC Uninterruptible Power Supply

Rugged flexibility to operate in the VHF/UHF spectrums and the AM/FM bands

Meets FAA ATC emergency communications needs

Flexible VHF/UHF AM radio operation plus "Jerk and Run" capability with Uninterruptible Power Supply

Provides back-up, emergency communications in a ruggedized, lightweight package

Optional second battery pack enables longer usage

### **Back-up Emergency or "Jerk and Run" Communications**

The General Dynamics URC-200 (V2) Uninterruptible Emergency Transceiver System combines the reliability of our URC-200 (V2) Transceiver with the UAD-100 Uninterruptible Power Supply for critical back-up emergency communications. The UAD-100 provides uninterruptible AC or DC power to the URC-200 (V2) Transceiver for use during power failures, accidents or other disruptions to the airport or air traffic control center communications. If an emergency forces air traffic controllers to leave the tower or make a fast exit from a site, the URC-200 (V2)/UAD-100 System provides "Jerk and Run" capability so it can be operated as a portable emergency transceiver.

#### **Versatile Alternative to PET-2000**

The URC-200 (V2) Uninterruptible Emergency Transceiver System is more versatile than the PET-2000 since it is multi-mode and multiconfigurable. The versatile, multi-band, multi-mode URC-200 (V2) offers rugged flexibility to operate in the VHF/UHF spectrum with the capability of AM and FM modulation.

With a wide range of accessories and band enhancement options, the URC-200 (V2) has the capability of adapting to a broad variety of application needs.



# **URC-200 (V2) UETS**

# The URC-200 (V2) LOS Family of Radios

General Dynamics designed its Line-of-Sight (LOS) URC-200 (V2) equipment to provide highly dependable service and to withstand the most demanding, harsh treatment and situations in the field. With a demonstrated reliability greater than 100,000 hours\* fielded, this multiband, multi-mode radio is highly versatile, easy to use and adaptable to many different applications, including manpack, rackmount, vehicular and intercom.

The RS-232 interface allows remote control access for the transceiver.

## The UAD-100 AC or DC Uninterruptible Power Supply

The UAD-100 Power Supply provides AC power connectivity as well as uninterruptible DC power for the URC-200 (V2) Transceiver. The power supply contains a high-efficiency AC and DC power unit with a rechargeable backup battery pack and charger with control circuits that allow the user to operate the transceiver from any AC power source worldwide.

The UAD-100 supplies uninterruptible DC power to the transceiver, while keeping the internal rechargeable battery pack in a fully charged state. During an AC or DC power failure, the battery pack automatically connects to the URC-200 (V2) Transceiver to provide up to 1.5 hours of uninterruptible power in 9 to 1 Rx to Tx duty cycle. Also available is the UAD-100A, which includes an optional second battery pack, doubling the battery operating time up to three hours.

It provides continuous worldwide operation from 85VAC to 270VAC/47-440 Hz and has a wide DC input range of 9 to 36VDC.

One rechargeable battery, one external AC cable, one external DC cable and one operation/maintenance manual are included.

**GENERAL DYNAMICS** 

\* Ground benign

**Mission Systems** 

#### General

- Frequency range:
  - VHF: 115 MHz to 149.9950 MHz (AM)
  - VHF: 115 MHz to 173.9950 MHz (FM)
- UHF: 225 MHz to 399.9950 MHz
- Tuning increments: 25 kHz, 12.5 kHz, 5 kHz and 8.33 kHz (opt.)
- Frequency stability: ± 1 PPM
- Operating modes: AM/FM Plain text voice, AM/FM Cipher text data with external COMSEC
- Preset channels: 10 transmit; 10 receive
- Pre-emphasis/De-emphasis: (FM plain text) pre/de-emphasis approximately 6dB per octave from 300 to 3000 Hz, 132 to 173.9950 MHz

#### **Receiver Characteristics**

Minimum Sensitivity:

- AM PT: -103.5 dBm for 10dB SINAD with 30% modulation at 1 kHz
- AM CT: -105 dBm for 10-3 BER, 70% AM at 16 kb/ sec.
- = FM PT: -114 dBm for 10dB SINAD with  $\pm$  6.5 kHz deviation at 1 kHz
- FM CT: -107 dBm for 10-3 BER with ± 5.6 kHz deviation on 16 kb/sec.
- Image response: ≥80 dB typical
- Spurious response: ≥80 dB typical
- Half IF response: ≥70 dB typical
- Audio response:
  - PT: 300 Hz to 3000 Hz
- CT: 30 Hz to 10.2 kHz
- Squelch range: Operator adjustable from below sensitivity to above -80 dBm
- Adjacent Channel Rejection:
  - 25kHz: 35dB typical
  - 8.33kHz: 45dB typical (ECS-8 option only)

#### **Transmitter Characteristics**

- Output power:
- FM high power = 10 W ± 2dB
- FM medium power = 5 W ± 2dB
- FM low power = 0.1 W ± 5dB
- AM high power = 10 W\* avg ± 2dB
- AM low power = 5 W\* avg ± 2dB \*at 80% AM
- Cipher test modulation: Data rates to 16 kb/ sec.
- Spurious output: ≥70 dB below the carrier typical
- Harmonic output: ≥53 dB below the carrier typical
- Adjacent Channel Power:
- 25kHz: 50dB typical
- 8.33kHz: 40dB typical (ECS-8 option only)

#### URC-200 (V2) Options

- EBN-30: 30 to 90 MHz frequency enhancement
- EBN-400: 400-420 MHz frequency enhancement
- ECS-8: 8.33 kHz Channel Spacing



The URC-200 (V2) UETS includes headset with cable



UAD-100 AC or DC Uninterruptible Power Supply mounted on the URC-200 (V2) Transceiver

# Phone 800-424-0052 • URCinfo@gd-ms.com • www.GDMissionSystems.com/los