

## AN/PRC-163

### Multi-channel Handheld Radio

The L3Harris AN/PRC-163 Multi-channel Handheld Radio is a versatile, secure solution that leverages crossbanding to provide simultaneous data and voice across SATCOM, Line-of-Sight and Mobile Ad-hoc Networking (MANET) modes.

As mission needs evolve, this software-defined handheld supports fast, in-field updates for new capabilities. An external mission module hardware interface allows warfighters to quickly add options including ISR full motion video (KIV-335A) and SATCOM (DTCS Mission Module).

The AN/PRC-163 has improved Size, Weight and Power (SWaP) compared to existing single-channel radios. Built off of L3Harris' Multi-channel Denali<sup>®</sup> security architecture, it features MANET waveforms for high-speed networking and seamless updates to future waveforms. It provides secure network connections to computing devices, including Android™ smartphones. Plus, the expansion module interface allows L3Harris to integrate additional technological capabilities to include third-party solutions.

The Human Machine Interface (HMI) of the AN/PRC-163 incorporates a familiar user experience that displays critical status information which can be manipulated via the front panel of the radio. The HMI can also be accessed remotely via a Keypad Display Unit (KDU) or End-User Device (Android Smart Phones and Windows based tablets or computers).

In addition to IW, SATCOM, and L-TAC™ (L-Band SATCOM), the AN/PRC-163 also offers alternative modes for Beyond-Line-of-Sight (BLOS) communications while on the move.



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## CONVERGING OF VOICE, DATA AND PLI IN A SINGLE LOW-SWaP PLATFORM

### KEY BENEFITS

- > High Assurance architecture allows Multiple Independent Levels of Security (MILS) up to TOP SECRET
- > Shared COP and mission effectiveness advanced through simultaneous, fully redundant, dual-channel voice, data and video crossbanding
- > Multiple capabilities in a single, compact, dual-channel handheld reduces cost for dismount and vehicular missions
- > Upgrades to evolving tactical needs are simplified through the expansion module interface and software-defined architecture
- > The KIV-335A (ISR Mission Module) allows for the reception of secure full-motion video to be disseminated into the tactical MANET
- > The Distributed Tactical Communication Service (DTCS) Mission Module provides a High Assurance BLOS voice and data capability that leverages the Iridium Satellite Network
- > WebUI simplifies radio network management via Android and Windows<sup>®</sup> devices
- > High-speed tactical MANETs expand real-time networking intel

| GENERAL                   |   |
|---------------------------|---|
| Frequency Range           | <b>R/T 1</b><br>VHF low: 30-88 MHz, VHF high: 118-174 MHz<br>UHF: 225-512 MHz<br>SATCOM: 300-320, MHz UL / 360-380 MHz DL<br>UHF SATCOM: 291-318.3 MHz UL / 243-270 MHz DL<br><b>R/T 2</b><br>UHF: 225-450 MHz, L/S-band: 1300-2600 MHz,<br>L-Band Waveform Option File required for<br>L-TAC™ capability |
| Channel Spacing/Bandwidth | R/T 1: 5 kHz-10 MHz, R/T 2: 5 kHz-40 MHz  |
| Net Presets               | 99 (standard); unlimited with multiple mission files  |
| GPS                       | Built-in module—SAASM L1/L2 or Commercial L1  |
| Management Tool           | Windows®-based Communications Planning Application (CPA); JENM compatible   |
| Frequency Tuning          | 10 Hz   |
| Software Environment      | SCA 2.2.2   |
| Frequency Stability       | 0.5 ppm   |

| PHYSICAL              |  |
|-----------------------|--|
| Dimensions            | 6 H x 3 W x 2 D in (15.24 x 7.62 x 5.08 cm)  |
| Volume (with battery) | 40 in <sup>3</sup> (655.48 cm <sup>3</sup> ) |
| Weight (with battery) | 2.75 lbs (1.25 kg)                           |
| Color/Finish          | CARC green                                   |

| ENVIRONMENTAL |  |
|---------------|--|
| Temperature   | Operating: -22°F to 131°F (-30°C to +55°C)<br>Storage: -40°F to 185°F (-40°C to +85°C) |
| Immersion     | 20 meters  |

| CHANNEL 1 WAVEFORMS |  |
|---------------------|--|
| Standard Waveforms  | VHF/UHF LOS, ANW2®C, SINGGARS, P25 (Conventional)                                  |
| Optional Waveforms  | SATURN, HPW, IW Phase 1/2, HAVEQUICK I/II, P25T Trunking (Low Band), ARROW, ANW2®D |

| CHANNEL 2 WAVEFORMS |  |
|---------------------|--|
| Standard Waveforms  | ANW2®C, UHF LOS, UHF SATCOM                        |
| Optional Waveforms  | TSM-X™, L-TAC®, Wraith™, WREN TSM, WREN NB, ANW2®D |

| MISSION MODULE                  |  |
|---------------------------------|--|
| KIV-335A (ISR)<br>12243-0100-0x | Freq Range: L/S/C/KU<br>Waveforms: BE-CDL, STD-CDL, TDL, 466ER, VNW, SUAS DDL, FM ANALOG |

| AVAILABLE MODES      |   |
|----------------------|---|
| Voice and Data Modes | <b>Voice:</b> Narrowband analog/PCM AM/FM, CVSD ASK/FSK cipher text, Wideband 2400 bps MELPe, LPC/2400-MELP – SATCOM (IW)<br><b>Data:</b> Narrowband analog/PCM AM/FM, CVSD ASK/FSK cipher text, Wideband up to 16 Mbps |

| POWER        |   |
|--------------|---|
| Power Input  | 9.6 to 34.3 VDC                             |
| Battery Type | Rechargeable lithium-ion battery (included) |

| SECURITY   |   |
|------------|---|
| Encryption | Denali®-based Type 1 Suite A/B (Trust Anchor capable) |

| TRANSMITTER          |  |
|----------------------|--|
| Power Output         | 250 mW to 5 W, 10 W SATCOM modes, 3.2 W L/S-band |
| Spurious Suppression | Per TIA-603D                                     |

| RECEIVER                   |   |
|----------------------------|---|
| Sensitivity                | 36.500 -52.000, -116 dBm, 12 dB SINAD<br>146.000 – 426.000, -114 dBm, 12 dB SINAD |
| Adjacent Channel Rejection | Per TIA-603D  |

| INTERFACES              |  |
|-------------------------|--|
| Data                    | USB 2.0, IP over USB, Ethernet                               |
| Audio                   | 19-pin ADF, 2-channel audio + KDU, USB 2.0, fill             |
| Antenna Ports           | 50-ohm TNC   |
| Programming             | USB 2.0  |
| Key Fill                | DS-101   |
| Function Knob           | FP and 15 Presents<br>Off/Load/Z/Volume/Mechanical Interlock |
| External Mission Module | Power, data, control/status                                  |

| STANDARD KIT INCLUDES |   |
|-----------------------|---|
| 12102-2700-01         | 13 in. miniblade 30-870 MHz                     |
| 12193-1000-xxxx       | RT-2062(C)/U MIL GPS or RT-2062A (C)/U COMM GPS |
| 12193-2740-01         | Dual-band 225-450 & 1300-2600 MHz               |
| 12500-2500-02         | 7.0 Ah Li-Ion battery                           |

**Note:** See AN/PRC-163 Handbook (10579-0007-2000) for accessories – [www.l3harris.com/all-capabilities/an-prc-163-multi-channel-handheld-radio](http://www.l3harris.com/all-capabilities/an-prc-163-multi-channel-handheld-radio)

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