

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® 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.





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 Common Operational Picture (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® devices
- > High-speed tactical MANETs expand real-time networking intel

GENERAL	
Frequency Range	R/T 1 VHF low: 30-88 MHz, VHF high: 118-174 MHz UHF: 225-512 MHz SATCOM: 300-320, MHz UL / 360-380 MHz DL UHF SATCOM: 291-318.3 MHz UL / 243-270 MHz DL R/T 2 UHF: 225-450 MHz, L/S-band: 1300-2600 MHz, L-Band Waveform Option File required for 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 ³ (655.48 cm ³)
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) Storage: -40°F to 185°F (-40°C to +85°C)
Immersion	20 meters

CHANNEL 1 WAVEFORMS	
Standard Waveforms	VHF/UHF LOS, ANW2®C, SINCGARS, 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 [™] (Type 3 and High Assurance), WREN TSM, WREN NB, ANW2 [®] D

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

AVAILABLE MODES	
Voice and Data Modes	Voice: Narrowband analog/PCM AM/FM, CVSD ASK/FSK cipher text, Wideband 2400 bps MELPe, LPC/2400-MELP – SATCOM (IW) Data: 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

RECEIVER	
Sensitivity	36.500 -52.000, -116 dBm, 12 dB SINAD 146.000 – 426.000, -114 dBm, 12 dB SINAD

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 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

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