

L3HARRIS AN/PRC-163

Multi-channel Handheld Radio

The L3Harris AN/PRC-163 (formerly known as RF-335M-STC) Multi-channel Handheld Radio is a versatile, secure solution that provides simultaneous up-and-down echelon connectivity, crossbanding capability, and critical interoperability and redundancy in a small form factor. Overlapping UHF and SATCOM band availability in both channels offers flexibility for any combination of SATCOM, VHF/UHF Line-Of-Sight or Mobile Ad-Hoc Networking (MANET) applications, including Signals-Based Threat Warning/Situational Awareness (SBTW/SA) and ISR video receiving.



The next-generation AN/PRC-163 has improved SWaP compared to existing single-channel radios. Built off of L3Harris' Multi-channel Denali® security architecture, it features TSM-X™ MANET for high-speed networking and seamless

updates to future waveforms. It provides secure network connections to computing devices, including Android™ smartphones. Plus, its expansion module interface secures L3Harris and third-party solutions that expand capabilities.

Using an ISR Video Module, the AN/PRC-163 delivers integrated tactical radio and video receiving capability with superior thermal performance, and easy-to-use crossbanding. The radio provides SBTW/SA features using advanced multi-node Time Difference of Arrival or single-node Angle of Arrival methods. It incorporates fully integrated MUOS-capable hardware, for true dismounted SATCOM on the move with only a single whip antenna.

The AN/PRC-163 incorporates a familiar yet enhanced user interface, providing critical status information at a glance, and allowing access to basic functions without removing the radio from its holster.

CONVERGING ISR VIDEO,
VOICE, CROSSBANDING,
SA/PLI, AND MORE

KEY BENEFITS

- > Distributed Common Operational Picture including ISR video
- > Close Air and Fires support
- > Beyond-Line-Of-Sight reachback
- > Tactical edge waveform

GENERAL	
Nomenclature	AN/PRC-163
Frequency Range	R/T 1 VHF low: 30-88 MHz VHF high: 118-174 MHz UHF: 225-512 MHz MUOS(A) SATCOM: 300-320 MHz UL / 360-380 MHz DL UHF SATCOM: 291-318.3 MHz UL / 243-270 MHz DL SBTW / SA: 30-2600 MHz R/T 2 UHF: 225-450 MHz L/S-band: 1300-2600 MHz
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

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	-116 dBm, 12 dB SINAD
Adjacent Channel Rejection	Per TIA-603D

POWER	
Power Input	9.6 to 34.3 VDC
Battery Types	Rechargeable lithium-ion battery (included) Non-rechargeable A123 battery cell holder Approved tethered battery solutions

SECURITY	
Encryption	Denali®-based Type 1 Suite A/B

AVAILABLE MODES AND WAVEFORMS	
Narrowband Waveforms	FM/FSK, AM/ASK, SINCGARS, HAVEQUICK I/II; P25
Wideband Waveforms	ANW2®C; SRW, TSM-X™
UHF SATCOM Waveforms	HPW, IW; future capability software upgrade: MUOS
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

L3Harris AN/PRC-163 Multi-channel Handheld Radio

© 2019 L3Harris Technologies, Inc. | 07/2019 DS607K

Non-Export Controlled Information

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.

PHYSICAL	
Dimensions	6 H x 3 W x 2 D in (15.24 x 7.62 x 5.08 cm)
Volume (with battery)	40 in³ (655.48 cm³)
Weight (with battery)	2.75 lbs (1.13 kg)
Color/Finish	CARC Green

ENVIRONMENTAL	
Temperature	Operating: -22°F to 140°F (-30°C to +55°C) Storage: -40°F to 185°F (-40°C to +85°C)
Immersion	20 meters

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	Preset switch: 16 Presets Mode/volume switch: Volume control + Off, Load, Z with mechanical interlock
External Mission Module	Power, data, control/status

STANDARD KIT INCLUDES	
AN/PRC-163	Multi-channel Handheld Radio Transceiver
12500-2500	7.0 Ah Li-Ion battery
12102-2700-01	13 in. miniblade 30-870 MHz
12193-2740-01	Dual-band 225-450 & 1300-2600 MHz

OPTIONAL ACCESSORIES	
12011-2730-01	45 in blade 30-512 MHz
12193-2710-01	Dismount Tether Antenna Mount
12236-1000-01	Power Adapter Interface (PAI)
RF-5853-CH	Battery Charger
12193-0340-A001	Cable, Key Fill/Audio Adapter
12193-0460-A006	Cable, USB High Speed Data
12193-1000-01	2-Port USB Side Adapter
12246-2000-01	Ethernet Adapter
12193-1590-01	Holster
12193-1595-01	Carrying Bag
12243-1000-01	ISR Mission Module
12193-2791-01	Signals-Based Threat Warning LVPA Kit



L3HARRIS™
FAST. FORWARD.

1025 W. NASA Boulevard
Melbourne, FL 32919