

## L3HARRIS FALCON III® AN/PRC-160(V)

### Wideband HF/VHF Tactical Radio System

The L3Harris Falcon III AN/PRC-160(V) is the smallest, lightest, fastest wideband HF manpack available. Engineered for advanced security and performance, the Wideband HF/VHF Tactical Radio System features industry-leading encryption, breakthrough data performance and interoperability with fielded Falcon II® HF radios, including the L3Harris AN/PRC-150(C).



This SWaP-optimized manpack delivers continuous coverage from 1.5 to 60 MHz with a single battery while providing 20 watts HF and 10 watts VHF power. With its high-speed wideband waveform, the AN/PRC-160(V) transmits data in bandwidths from 3 kHz to 24 kHz. Data rates of up to 120 kbps are supported through technology that optimizes channel selection and adapts the selected channel to real-time conditions.

The NSA-certified RT-2060(C)/U and RT-2061(C)/U, components of the AN/PRC-160(V)1 and AN/PRC-160(V)2, will protect the confidentiality of legacy and modern voice and data up to the U.S. TOP SECRET level with L3Harris Sierra™ II software programmable encryption.

This wideband manpack supports secure interoperability with Coalition and Partnership for Peace forces through modern algorithms, including the L3Harris proprietary Citadel® and AES encryption.

In addition to MIL-STD-188-141B ALE, a third-generation automatic link establishment per STANAG 4538, provides improved ease of use and high-performance reliability. The embedded SAASM or commercial GPS receiver ensures accurate Position Location Information for enhanced Situational Awareness.



### Advanced Security and Power in a Lightweight Manpack

#### KEY BENEFITS

- > World's first and only Type 1 HF manpack meeting new NSA crypto-modernization requirements
- > Data rates up to 10 times greater than existing HF radios
- > Secure interoperability among U.S., Coalition and Partnership for Peace forces
- > Supports immediate radio replacement using existing L3Harris vehicular and base station equipment
- > Smallest, lightest, fastest HF manpack available today

GENERAL	
RT Nomenclature	RT-2060(C)/U part of AN/PRC-160(V)1 (SAASM GPS version) RT-2061(C)/U part of AN/PRC-160(V)2 (Commercial GPS version)
Frequency Range	1.5-59.999 MHz
Net Presets	75, fully programmable
RF Input/Output Impedance	50 ohm nominal, unbalanced
Frequency Hopping	Serial tone ECCM Falcon II interoperable
Automatic Link Establishment (ALE)	STANAG 4538 FLSU, MIL-STD-188-141B Appendix A, Appendix B (Linking Protection, AL-1)
Frequency Stability	$\pm 1 \times 10^{-6}$
Power Input	26 VDC (21.5-35 VDC)

TRANSMITTER	
Power Output	HF: 1, 5, 20 watts PEP, -1/+1 dB VHF: 1, 5, 10 watts FM
Audio Input	1.5 mV at 150 ohm or 0 dBm at 600 ohm for full rated output
Carrier Suppression	> 60 dB below PEP output (J3E mode)
Undesired Sideband Suppression	> 60 dB below PEP output
Antenna Tuning Capability	OE-505 10-foot (3 m) whip (1.6-60 MHz), RF-1940-AT001/RF-1941 dipole RF-1936, RF-1912, random wires, long wires
Vocoder	HF: LPC-10-52E (600/2400), MELP (600/1200/2400) VHF: CVSD

RECEIVER	
Sensitivity	SSB: -113 dBm (0.5 $\mu$ V) for 10 dB SINAD
Audio Output	12 mW at 1000 ohm to external handset
Squelch	Front panel adjustable, active squelch selectable
IF Rejection	> 80 dB
Image Rejection	> 80 dB (1st IF image)
AGC	Mode dependent, automatically selected
Intermodulation Distortion	-80 dB or better for two -30 dBm signals separated 30 kHz or more
Overload Protection	Receiver protected to 32 VRMS

SECURITY	
Encryption Modes	Supports legacy and modern algorithms
Encrypted Data	HF: MIL-STD-188-110C App. D, App. C, and main body serial-tone waveforms, STANAG 4415, STANAG 4539 VHF: WBFSSK (16 kbps)

MODES AND WAVEFORMS	
Emission Modes	J3E (single sideband, upper or lower, suppressed carrier telephony) H3E (compatible AM single sideband plus full carrier) A1A, J2A (compatible CW), selectable; F3E (FM) and HF ECCM
Wideband HF Data	MIL-STD-188-110C Appendix D and Wideband HF Internet Protocol Data

PHYSICAL	
Dimensions	3.3 H x 7.9 W x 9.2 D in (8.3 H x 20 W x 23.4 D cm)
Weight	9.1 lbs (4.1 kg) without batteries
Color/Finish	CARC green

ENVIRONMENTAL	
Shock and Vibration	MIL-STD-810G for ground tactical
Immersion	1 meter of water (3 ft)
Temperature	-40°F to +159°F (-40°C to +71°C)
Sand/Dust/Salt/Fog/Rain	MIL-STD-810G

INTERFACES	
Data Interfaces	USB and Ethernet with adapter, synchronous or asynchronous (RS-232C)
Networking	Narrowband and wideband HF IP, SNMP, Automatic Position Reporting (PLI)

INCLUDED ACCESSORIES	
10515-0512-4200	Operator's manual
10512-0512-4000	Operator's card
10515-6648	Instruction sheet, dismount dipole adapter
10515-0512-4100	Field reference guide
AN/PRC-160-CD001	Communications Programming Application
RF-3070-AT242	GPS antenna for AN/PRC-160(V)1
12006-0017-02	GPS antenna for AN/PRC-160(V)2
10372-0240-02	OE-505 manpack antenna kit
10372-1260-01	Antenna assembly adapter
10372-1270-01	Dismount dipole adapter
10075-1399	H-250/U lightweight handset (modified)
12043-4800-01	Battery box
10303-1008-01	Ground stake kit
12043-2850-A006	Cable assembly program/data (USB)
RF-6705	Tactical Chat IP

OPTIONAL ACCESSORIES	
12200-8501-01	LPI/LPD Option
RF-5910-PS005	Falcon III Battery Eliminator
10553-0100-02	KDU Remote Control Kit
12083-0707-A003	USB/Ethernet® Adapter Cable

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