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.

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

<table>
<thead>
<tr>
<th>RT Nomenclature</th>
<th>RT-2060(C)/U part of AN/PRC-160(V)1 (SAASM GPS version)</th>
<th>RT-2061(C)/U part of AN/PRC-160(V)2 (Commercial GPS version)</th>
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</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>1.5–59.999 MHz</td>
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<tr>
<td>Net Presets</td>
<td>75, fully programmable</td>
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<tr>
<td>RF Input/Output Impedance</td>
<td>50 ohm nominal, unbalanced</td>
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<tr>
<td>Frequency Hopping</td>
<td>Serial tone ECCM Falcon II interoperable</td>
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## AUTOMATIC LINK ESTABLISHMENT (ALE)


## FREQUENCY STABILITY

±1x10^-6

## 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 μV) 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

## 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 LPD/LPD Option
- RF-5910-P5005 Falcon III Battery Eliminator
- 10553-0100-02 KDU Remote Control Kit
- 12083-0707-A003 USB/Ethernet® Adapter Cable