The L3Harris XL-185P is the industry’s leading converged single-band Land Mobile Radio (LMR) with LTE. Situational Awareness is front and center as you combine crystal clear audio over your P25 radio system and data sharing capabilities on nationwide broadband networks. With industry-leading technology at your fingertips, you have more ways and more places to connect.

Engineered for top performance in severe conditions, the XL-185P is an ideal, economical choice for Public Safety and Utility workers. The XL-185P delivers industry-leading, loud audio powered by a 1.5 watt/4 watt max amplifier with woofer and tweeter speakers—and advanced noise cancellation technologies suppressing audio feedback to provide clear communications through a wide range of conditions.

The portable features a ruggedized aluminum I-beam frame and meets MIL-STD-810G for durability, including Method 511.5 for explosive atmospheres and Method 504.1 for contamination by fluids, so it can be scrubbed with cleansers and biological sanitizers.

Compact and lightweight, the XL-185P fits naturally into users’ hands, with controls shaped for fast, easy, gloved-hand operation. The color-coded display and easy-access A-B-C-D switching allows fast identification and selection of priority talk groups. First Responders also avoid missing critical calls through the portable’s ability to instantly recall and replay received audio.

The XL-185P supports a choice of encryption methods for secure communications, including single-key AES.

FirstNet and the FirstNet logo are registered trademarks and service marks of the First Responder Network Authority. All other marks are the property of their respective owners.
GENERAL

Radio Models:
- Full Keypad
- Partial Keypad

Dimensions w/Battery (H x W x D)
5.8 x 2.3 x 1.4 in (148.0 x 60.0 x 36.0 mm)

Weight
- w/ Battery, Antenna and LTE Modem: 18.2 oz (516 g)
- w/Battery and Antenna: 16.2 oz (464 g)
- w/o Battery and Antenna: 10.4 oz (296 g)

Housing Colors
Midnight Black, High-Visibility Yellow and High-Visibility Green

Interfaces:
- Front Display: 320 x 178 pixels, 1.8 inch transflective LCD, 16-bit color with backlight
- Top Display: 128 x 32 pixels, OLED 1.1 inch multi-color backlight, sunlight readable
- Keypad: Backlight, 3 soft keys, 5-way navigation key, full DTMF keypad
- Buttons: Large PTT button, on/off knob, volume knob, red emergency button, 16-position top-mounted rotary knob, 2-position concentric switch, 4-position toggle switch, 3 programmable side buttons
- Tx/Rx Indicator: Multi-colored LEDs

Channel/Talkgroup Capacity
1,250 total conventional channels and 13,824 total talkgroups

Radio Programming
Firmware, personalities and feature set over Wi-Fi

Transceiver
- Supported Bands: VHF, UHF, 700/800 MHz or 900 MHz, and LTE (optional)
- Channel Capacity: 12,500 (1,250 per mission plan)

Environmental:
- Relative Humidity: 5% @ 140°F (+60°C), 95% @ 122°F (+50°C)
- Vibration: USDA LMR Standard, Section 2.15 and MIL-STD-810G, Test Method 514.6
- Drop Shock: 1.5 meter drop to concrete (exceeds TIA-603-D)
- Immersion¹: 2 meters for 4 hours in accordance with MIL-STD-810G/IP68

Operating Temperature²
-22° to +140°F (-30° to +60°C)

Storage Temperature³
-40° to +176°F (-40° to +80°C)

Altitude
- Operational: 15,000 feet (4,572 meters)
- In Transit: 40,000 feet (12,192 meters)

Electrical Input Voltage
7.5 VDC (nominal)

GPS/GNSS Specifications:
- Channels: P25 standard Tier 2 and L3Harris in-band
- Tracking Sensitivity (dBm): -52
- Acquisition Sensitivity (dBm): -166 (GPS), -163 (GLONASS)
- Cold Start w/-130 dBm input: <35 seconds
- Hot Start w/-130 dBm input: <1 second

Safety:
- Hazardous Location Options: Optional feature
- RoHS Compliant: ²

¹ Optional feature
² Extreme low temperatures adversely affect battery life
³ Store batteries at +25°C ± 5°C

LMR TRANSMITTER

<table>
<thead>
<tr>
<th>Frequency Bands</th>
<th>VHF</th>
<th>UHF</th>
<th>700/800 MHz</th>
<th>900 MHz*</th>
</tr>
</thead>
</table>
| Frequency Ranges (MHz)
| Frequency Stability (-30 to +60°C) | ±1.0 ppm | ±1.0 ppm | ±0.5 ppm | ±0.5 ppm |
| Modulation Limiting (kHz) | 2.5, 4, 5 (FM) | 2.5, 4, 5 (FM) | 2.5, 4, 5 (FM) | 2.5, 4, 5 (FM) |
| Audio Response (dB) | +1/-3 | +1/-3 | +1/-3 | +1/-3 |
| Spurious and Harmonics (dBc) | -80 (FCC Part 90) | -80 (FCC Part 90) | -80 (FCC Part 90) | -80 (FCC Part 90) |
| FM Hum and Noise Companion Receiver (dB):
  @ 25 kHz  | 70  | 60  | 55  | 55 |
|  @ 12.5 kHz | 47  | 47  | 45  | 45 |
| Audio Distortion (%) | <1.25 | <1.25 | <1.25 | <1.25 |
| Project 25 Modulation Fidelity (%) | 1.0 | 1.0 | 1.0 | 1.0 |
| Project 25 Adjacent Channel Power (dBc) | >71 | >71 | >71 | >70 |

*Configurations supporting the three (3) 700, 800 and 900 MHz frequency bands do not support 768-776 MHz/763-776 MHz talkaround
### BROADBAND

<table>
<thead>
<tr>
<th>Protocol</th>
<th>LTE Protocol</th>
<th>3GPP Release 11, Category 12, Power Class 3 UE with support for QoS QCI</th>
</tr>
</thead>
</table>

### North America LTE Option

- **FCC ID:** N7NEM75S
- **4G LTE Bands:** B2, B4, B5, B12, B13, B14, B17, B29*, B30*, B66
- **3G Bands:** B2, B5

### International LTE Option (In selected countries)

- **4G LTE Bands:** B1, B3, B5, B7, B8, B28
- **3G Bands:** B1, B5, B8

### Wi-Fi

- **802.11 b/g/n 2.4 GHz and 5 GHz; supports 24 preconfigured and 8 user configured networks**

### Bluetooth

- **Bluetooth 4.0 (128-bit encryption)**

### SPECIFICATIONS FOR: XL-185P PORTABLE RADIO

#### LMR RECEIVER

<table>
<thead>
<tr>
<th>Frequency Bands</th>
<th>VHF</th>
<th>UHF</th>
<th>700/800 MHz</th>
<th>900 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Ranges (MHz):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option 1 (US)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>136-174 MHz 136-174 MHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>378-522 MHz 378-522 MHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>382-522 MHz 382-522 MHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Channel Spacing (kHz)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 (wideband), 12.5 (narrowband), 6.25 equiv (TDMA P25 Phase 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency Stability (-30 to +60°C)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>±1.0 ppm</td>
<td>±1.0 ppm</td>
<td>±1.0 ppm</td>
<td>±1.0 ppm</td>
<td></td>
</tr>
<tr>
<td>Sensitivity (dBm): @ 12 dB SINAD</td>
<td>-122</td>
<td>-121</td>
<td>-121 (700 MHz)</td>
<td>-120 (800 MHz)</td>
</tr>
<tr>
<td>Project 25 Reference Sensitivity (dBm): @ 5% BER</td>
<td>-122</td>
<td>-121</td>
<td>-120.5</td>
<td>-120.5</td>
</tr>
<tr>
<td>Analog Selectivity (dB): @ 25 kHz @ 12.5 kHz</td>
<td>77</td>
<td>71</td>
<td>77</td>
<td>70</td>
</tr>
<tr>
<td>Intermodulation (dB)</td>
<td>80</td>
<td>81</td>
<td>77</td>
<td>77</td>
</tr>
<tr>
<td>Audio Output - Rated/Max (mW)</td>
<td>1500/4000</td>
<td>1500/4000</td>
<td>1500/4000</td>
<td>1500/4000</td>
</tr>
<tr>
<td>Audio Distortion @ Rated Power (%)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

### BROADBAND

- **LTE Protocol**
  - 3GPP Release 11, Category 12, Power Class 3 UE with support for QoS QCI

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### Wi-Fi

- 802.11 b/g/n 2.4 GHz and 5 GHz; supports 24 preconfigured and 8 user configured networks

### Bluetooth

- Bluetooth 4.0 (128-bit encryption)

*Downlink only for Carrier Aggregation*
## DIGITAL OPERATION

<table>
<thead>
<tr>
<th>Protocol</th>
<th>ProVoice™</th>
<th>P25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocoder Method</td>
<td>AMBE +2™ enhanced full rate</td>
<td>AMBE +2 enhanced full rate and enhanced half rate</td>
</tr>
<tr>
<td>Signaling Rate (kbps)</td>
<td>9.6</td>
<td>9.6</td>
</tr>
<tr>
<td>Modulation</td>
<td>GFSK</td>
<td>Phase 1 Tx: C4FM, Rx: C4FM and WCQPSK</td>
</tr>
<tr>
<td>L3Harris Failsoft operation</td>
<td>Switch to site trunking mode (for L3Harris infrastructure) or P25 conventional</td>
<td></td>
</tr>
</tbody>
</table>

## ENCRYPTION

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Encryption Keys per Radio</td>
<td>Capable of storing 128 keys (128 AES, 64 DES), store up to 5 UKEKs per radio</td>
</tr>
<tr>
<td>Keying</td>
<td>L3Harris Key Loader, Over-the-Air Rekeying (OTAR) for respective UKEKs, Motorola KVL 3000+/4000</td>
</tr>
<tr>
<td>Standards</td>
<td>FIPS 140-2, FIPS 197</td>
</tr>
</tbody>
</table>

## BATTERIES

<table>
<thead>
<tr>
<th>Type</th>
<th>Dimensions (H x W x D)</th>
<th>Weight</th>
<th>Capacity (mAh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Li-Ion</td>
<td>3.0 x 2.3 x 0.9 in</td>
<td>4.8 oz (136 g)</td>
<td>3100</td>
</tr>
</tbody>
</table>

## ACCESSORIES

### Headsets

The XL-185P can be used with a wide variety of headsets and covert audio accessories to provide a complete user-gear solution for the industrial, Public Safety, Utility and Transportation markets. Heavy-duty and lightweight headsets are available with in-ear or over-the-ear hearing protection, flexible boom microphones with noise-reduction technology, and standard or remote PTTs. In addition, the XL-185P can be used with Bone Conducting Skull Headsets and Throat Microphone/Headset Kits. Covert audio kits are available in black or beige, 2-wire or 3-wire configurations with ear-piece, microphone and PTT.

### Speaker Microphones

L3Harris offers a versatile line of speaker microphones for the XL-185P. In addition, a premium leather holster is available for attaching to a belt or wearing with the premium leather shoulder strap.

### Chargers

L3Harris offers a variety of chargers for the XL-185P including Single-Bay, 2-Bay, Multi-Bay and a Vehicular Charger for in-car charging. The chargers are designed to quickly and safely charge battery packs in approximately 1 to 4 hours.

### Additional Accessories Available

- Bluetooth speaker microphones
- Bluetooth covert earpieces
- standard speaker microphones
- Lithium Ion battery
- PC programming software and cables
- other subminiature surveillance accessories, and antennas

*Accessories unavailable in Brazil

Technical specifications are subject to change without notice. Product sales are subject to applicable U.S. export control laws.