



**L3HARRIS™**  
FAST. FORWARD.

## XL-185M/XL-200M

### Single-band and Multiband P25 Mobile Radios

GENERAL	
<b>Dimensions (H x W x D):</b>	
Radio Only	2.0 x 6.9 x 9.7 in (49 x 174 x 230.5 mm)
Radio and Control Unit (includes knobs)	2.4 x 6.9 x 12.8 in (60 x 175 x 320.7 mm)
Control Unit (Remote) (includes knobs)	2.4 x 6.9 x 4.0 in (60 x 175 x 72.2mm)
<b>Weight:</b>	
Remote Mount Radio	5.0 lbs (2.3 kg)
Control Unit (Remote Mount)	1.3 lbs (0.6 kg)
Front Mount Radio with Control Unit	7.0 lbs (3.2 kg)
<b>Channel / Talkgroup Capacity</b>	12,500 (1,250 per mission plan—up to 10 mission plans)
<b>Control Unit</b>	18-bit color LCD 480 pixels x 220 pixels 3.3-inch color LCD with up to 3 lines of text 5 programmable favorites buttons Separate volume and channel selector knobs Built-in speaker Single DIN sizing 2 USB-C ports (1 for microphone)
<b>Speakers:</b>	
External, 15 W	Two channels of 15 W of audio (< 3% distortion) on both the radio body and control head
Internal, 3 W	Built-in Control Head Speaker
<b>Environmental Specifications:</b>	
Relative Humidity	Per MIL-STD-810G
Ambient Temperature Range	-22 to +140°F (-30 to 60°C)
<b>Altitude:</b>	
Operational	15,000 ft (4,572 m)
In-Transit	50,000 ft (15,240 m)
<b>Electrical</b>	
System Voltage	10.8 to 16.6 VDC negative ground
Standby Current Drain	1 A
Receive Current Drain	2 A
Current Drain @ 35W TX	10 A
Current Drain @ 50W TX	15 A
<b>GPS/GNSS:</b>	
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	-146 (GPS)
Hot Start w/-130 dBm input	< 35 seconds
	< 1 second



The single-band XL-185M and multiband XL-200M P25 mobile radios deliver audio excellence through an ergonomic digital microphone and advanced noise cancellation technology to enable you to be heard in noisy environments. Designed for the unique demands of Public Safety and Utilities, the XL FAMILY of mobile radios are LTE-capable\* and feature standard Wi-Fi®, Bluetooth® and GPS. These advanced mobile radios meet MIL-STD-810G to operate in extremely rugged conditions and are easy to use with a high-visibility 3.3-inch color LCD display, 8 programmable buttons and simple menu access.

\*Future release

**LMR TRANSMITTER**

Frequency Bands (MHz)	VHF	UHF	700/800	900
Frequency Range (US)	136-174	378-522	768-776, 798-806, 806-816, 851-861	896-902, 935-944
Frequency Range (Int'l)	136-174	378-522	763-776, 793-806, 806-825, 851-870	896-902, 935-944
Modulation Limiting (kHz)	2.5, 5 (FM)			5 (FM)
Audio Response	Meets TIA-603-D Section 3.2.6			
Spurious and Harmonics (dBc)	< -75, FCC Part 90	< -70, FCC Part 90	< -75, FCC Part 90	< -75, FCC Part 90
FM Hum and Noise (dB @ 12.5 kHz)	45.0			
FM Hum and Noise (dB @ 25k Hz)	47.0			
Audio distortion (%)	< 1.0			
P25 Modulation Fidelity (%)	< 3.00			
Frequency Stability (ppm)	±1.5			
P25 Adjacent power (dBc)	> 67	> 67 @ 50 W (378-512 MHz) > 67 @ 25 W (512-522MHz)	> 67	> 67
Channel spacing (kHz)	12.5, 25			12.5
Conducted emissions (dBc)	-75	-70	-75	-75
Radiated emissions	Meets TIA/EIA-603-D 3.2.12			

**LMR RECEIVER**

Frequency Bands	VHF	UHF	700/800	900
Frequency Range (US)	136-174	378-522	768-776, 851-861	935-944
Frequency Range (Int'l)	136-174	378-522	763-776, 851-870	935-944
Channel spacing (kHz)	12.5, 25			12.5
Sensitivity (12 dB SINAD)	-119 dBm			
P25 sensitivity (5% BER)	-119 dBm			
Adjacent channel rejection @ 25 kHz (dB)	77	78	76	NA
Adjacent channel rejection @ 12.5 kHz (dB)	72	70	70	70
P25 Adjacent channel rejection @ 12.5 kHz (dB)	60	60	60	60
Intermodulation Distortion (dB)	77	78	75	75
FM Hum and Noise @ 12.5kHz (dB)	49	47	45	45
FM Hum and Noise @ 25 kHz (dB)	50	50	47	NA
Rated audio output	2 channels of 15W RMS into 4 Ohm			
Audio distortion	< 3.0% @ rated power			
Stability (ppm)	+/- 1.5			
Spurious Rejection (dB)	92	90	88 74 (771.3-772.3)	88
Selectivity (dB)	NA	NA	20 (NPSPAC Only)	NA

## BROADBAND

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)
LTE	Future release

## ENVIRONMENTAL STANDARD

Applicable MIL-STD	Parameter	Methods	Procedure/Categories
<b>MIL-STD-810G*</b>			
	Low Pressure	500.5	1,2
	High Temperature	501.5	1,2
	Low Temperature	502.5	1,2
	Temperature Shock	503.5	1-B
	Solar Radiation	505.5	1/A1
	IP65 (Control Unit)	506.5	1, 3
	IP54 (Radio)	506.5	3
	Humidity	507.5	2
	Salt Fog	509.5	1
	Blowing Dust	510.5	1,2
	Vibration (Basic Transportation)	514.6	1, Category 4
	Vibration (Minimum Integrity)	514.6	1, Category 24
	Shock (Crash Hazard)	516.6	5
	Shock (Bench Handling)	516.6	6
<b>U.S. Forest Service</b>	Vibration (10-60 Hz)	Paragraph 2.15	
<b>IEC 60529</b>	Dust-tight and water jets	IP65 (Control Unit)	Table 2, Par. 13.4 Table 3, Par. 14.2.5

\*Also meets equivalent superseded MIL-STD-810D, E and F

## DIGITAL OPERATION

Protocol	P25	ProVoice™
<b>Vocoding Method</b>	AMBE+2™ Enhanced Full Rate & Enhanced Half Rate	AMBE+2™ Enhanced Full Rate
<b>Signaling Rate (kbps)</b>	9.6	9.6
<b>Modulation</b>	Phase 1 TX: C4FM, RX: C4FM & WCQPSK Phase 2 TX: HCPM, RX: WCQPSK	GFSK
<b>L3Harris Failsoft Operation</b>	Switch to site trunking mode (for L3Harris infrastructure) or P25 conventional	

## ENCRYPTION

<b>Encryption Algorithms</b>	Voice Encryption: Single-key AES/DES Multiple-key AES/DES DES-OFB Encryption Lite (ARC4) 256-bit AES P25 64-bit DES Control Channel Encryption: 128-bit AES (LLA)
<b>Encryption Keys</b>	128 keys (128 AES, 64 DES)
<b>Encryption Keying</b>	L3Harris Key Loader, P25 Conventional and Trunked Over-the-Air-Rekeying (OTAR)

## REGULATORY DATA

Frequency Range	RF Output (W)	Frequency Stability	FCC Type Acceptance ID	Applicable FCC Rule	Industry Canada ID	Applicable Industry Canada Rule
136-174	50		OWDTR-0161-E	90	3636B-0161	RSS-119
378-522	50		OWDTR-0161-E	90	3636B-0161	RSS-119
763 – 776, 793 - 806	30.0	0.1	OWDTR-0161-E	90	3636B-0161	RSS-119
806 - 825, 851 - 870	35.0	0.1	OWDTR-0161-E	90	3636B-0161	RSS-119
896-901	35.0	0.1	OWDTR-0161-E	90	3636B-0161	RSS-119
935-944	35.0	0.1	OWDTR-0161-E	90, 101	3636B-0161	RSS-119
Emissions Designators	16K0F3E, 16K0F1D, 16K0F1E, 14K0F3E, 14K0F1D, 14K0F1E, 11K0F3E, 11K7F1D, 11K7F1E, 7K10F1D, 7K10F1E, 8K40F1D, 8K40F1E, 8K10DXW, 18K5F1W, 12K9F1W					

## ACCESSORIES

**Microphone:** Tough, ergonomic digital microphone enabling noise cancellation

**Keypad Mobile Microphone:** Rugged handheld microphone with 12-button alphanumeric keypad, 5-way controller to provide the functions of the radio control head in the palm of the hand, and noise cancellation

**Desktop Cabinet:** Supports desktop deployment of the XL mobile radio in front-mount, remote mount and control head only configurations

**External speaker:** Light, compact, and carefully tuned for the human voice, the XL-185M external speakers deliver clear and loud mission critical voice in an easy-to-mount enclosure

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

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### 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.



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