XL-200P PORTABLE

Converged LTE Land Mobile Radio

The L3Harris XL-200P is the industry's leading converged multiband LTE, full-spectrum LMR enabling users to connect in more places and improve Situational Awareness. Capable of operating on VHF, UHF and 700/800 MHz frequencies, this powerful portable merges robust LMR voice with voice and data over LTE and Wi-Fi®, and is Verizon Certified.

Designed from the ground up, the XL-200P is engineered for audio excellence. It combines a powerful 1.5/4.0 watt max amplifier and custom speakers with advanced noise cancellation technology to suppress feedback, delivering clear communications in a wide range of noisy environments.

Compact and ergonomic, the portable's shape is based on extensive research, resulting in a radio that fits naturally in users' hands. Controls are shaped and arranged for ease of use and optimum performance, including accessory connections.

With its ruggedized aluminum I-beam frame and tough seals, the XL-200P is built to operate in severe environments. This radio 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.

The XL-200P supports a choice of encryption methods for secure communications, including single-key AES.

EXCEPTIONAL COMMUNICATIONS IN SEVERE ENVIRONMENTS

KEY BENEFITS

> Instant recall of received audio replays transmissions to avoid missed calls

> Optional cell modem for voice and data wherever cellular/LTE is available

> Built-in GPS, Bluetooth®, Active Noise Cancellation, and 4-position A-B-C-D switch standard

L3Harris.com

SPECIFICATIONS FOR: XL-200P PORTABLE FULL-SPECTRUM MULTIBAND RADIO

GENERAL

Radio Models:
    Full Keypad
    Partial Keypad
	TFT LCD w/DTMF keypad, navigation cluster, soft keys
	TFT LCD w/partial keypad, navigation cluster, soft keys	

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 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
    Top Display
    Keypad
    Buttons
 	
    Tx/Rx Indicator
	320 x 178 pixels, 1.8 inch transflective LCD, 16-bit color with backlight
	128 x 32 pixels, 1.1 inch multi-color backlight, sunlight readable
	Backlight, 3 soft keys, 5-way navigation key, full DTMF keypad
	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
	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 and LTE	**Channel Capacity** 12,500 (1,250 per mission plan)

Environmental:
    Relative Humidity
    Vibration
    Drop Shock
    Immersion[1]
	5% @ 140°F (+60°C), 95% @ 122°F (+50°C)
	USDA LMR Standard, Section 2.15 and MIL-STD-810G, Test Method 514.6
	1.5 meter drop to concrete (exceeds TIA-603-D)
	2 meters for 4 hours in accordance with MIL-STD-810G/IP68	

Operating Temperature[2]	-22° to +140°F (-30° to +60°C)	
Storage Temperature[3]	-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
    Tracking Sensitivity (dBm)
    Acquisition Sensitivity (dBm)
    Cold Start w/-130 dBm input
    Hot Start w/-130 dBm input
	P25 standard Tier 2 and L3Harris in-band
	52
	-166 (GPS), -163 (GLONASS)
	-146 (GPS)
	<35 seconds
	<1 second	

Safety:
    Hazardous Location Options
    RoHS Compliant
	Approved for use in the U.S. and Canada in Class I, Division 2 Groups A, B, C and D hazardous locations	

[1] Optional feature
[2] Extreme low temperatures adversely affect battery life and audio power/ distortion
[3] Store batteries at +25°C ± 5°C

LMR TRANSMITTER

Frequency Bands	VHF*	UHF*	700/800 MHz
Frequency Ranges (MHz) **Option 1 (U.S.)**	136-174	378-522	768-776, 798-806, 806-816, 851-861
Option 2 (International)	136-174	378-522	763-776, 793-806, 806-825, 851-870
Rated RF Power/Talkaround (W)	1-6	1-5	0.5-3
Frequency Stability (-30 to +60°C)	±1.0 ppm	±1.0 ppm	±1.0 ppm
Modulation Limiting (kHz)	2.5, 4, 5 (FM)	2.5, 4, 5 (FM)	2.5, 4, 5 (FM)
Audio Response (dB)	+1/-3	+1/-3	+1/-3
Spurious and Harmonics (dBc)	-80 (FCC Part 90)	-80 (FCC Part 90)	-80 (FCC Part 90)

FM Hum and Noise Companion Receiver (dB):
    @ 25 kHz
    @ 12.5 kHz
	
	70
	47
		
		60
		47
			
			55
			45

Audio Distortion (%)	<1.25	<1.25	<1.25
Project 25 Modulation Fidelity (%)	1.0	1.0	1.0
Project 25 Adjacent Channel Power (dBc)	>71	>71	>71

*Full-spectrum multiband VHF and UHF product is compliant with applicable FCC narrowbanding mandate below 512 MHz

SPECIFICATIONS FOR: XL-200P PORTABLE FULL-SPECTRUM MULTIBAND RADIO

REGULATORY DATA

Frequency Range	RF Output	Frequency Stability	FCC Type Acceptance No.	Applicable FCC Rules	Industry Canada Certification No.	Applicable Industry Canada Rules	NTIA Cert. No.
851-861 MHz	3 W	±1.0 ppm	OWDTR-0133-E	90	3636B-0133	RSS-119	
851-869 MHz	3 W	±1.0 ppm	OWDTR-0145-E	90	3636B-0133	RSS-119	
2402-2480 MHz	0.2 W	N/A	OWDTR-0133-E, OWDTR-0145-E	15w	3636B-0133, 3636B-0145	RSS-119	
5180-5825 MHz	0.1 W	N/A	OWDTR-0133-E, OWDTR-0145-E	15	3636B-0133, 3636B-0145	RSS-119	

LMR RECEIVER

Frequency Bands	VHF	UHF	700/800 MHz
Frequency Ranges (MHz): Option 1 (U.S.) Option 2 (International)	 136-174 136-174	 378-522 378-522	 768-776, 851-861 763-776, 851-870
Channel Spacing (kHz)	25 (wideband*), 12.5 (narrowband), 6.25 equiv (TDMA P25 Phase 2)		
Frequency Stability (-30 to +60°C)	±1.0 ppm	±1.0 ppm	±1.0 ppm
Sensitivity (dBm): @ 12 dB SINAD	-122	-121	-121 (700 MHz) -120 (800 MHz)
Project 25 Reference Sensitivity (dBm): @ 5% BER	-122	-121	-120.5
Analog Selectivity (dB): @ 25 kHz @ 12.5 kHz	 77 71	 77 70	 74 64
Project 25 Adjacent Channel Rejection (dB)	66.2	62.2	62
Offset Channel Selectivity (dB): @ NPSPAC	NA	NA	30
Intermodulation (dB)	80	81	77
Spurious and Image Rejection (dB)	90	87	80
FM Hum and Noise (dB): @ 25 kHz @ 12.5 kHz	 -60 -55	 -60 -53	 -55 -50
Audio Output - Rated/Max (mW)	1500/4000	1500/4000	1500/4000
Audio Distortion @ Rated Power (%)	1.1	1.1	1.1

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ENVIRONMENTAL STANDARD

Applicable MIL-STD	Parameter	Methods	Procedure/Categories
MIL-STD-810G*	Low pressure	500.5	1, 2
	High temperature	501.5	1, 2
	Low temperature	502.5	1, 2
	Temperature shock	503.5	1
	Solar radiation	505.5	1
	Contamination by fluids	504.1	2
	Rain	506.5	1, 3
	Humidity	507.5	2
	Salt fog	509.5	1
	Blowing dust and sand	510.5	1, 2
	Explosive atmosphere	511.5	1
	Immersion in water**	512.5	1
	Vibration (minimum integrity)	514.6	1, Category 24
	Vibration (basic transportation)	514.6	1, Category 4
	Shock (functional/basic)	516.6	1
	Shock (transit drop)	516.6	4
	Shock (bench handling)	516.6	6
IEC 60529	Dust-tight, continuous immersion in water**		IP68

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

CELLULAR BROADBAND

LTE Protocol	3GPP Release 10, Power Class 3 UE with Rx diversity
Commercial Broadband	Verizon Certified Band 13, 777-787 MHz Tx, 746-756 MHz Rx, 5 or 10 MHz BW Verizon Certified Band 4, 1710-1755 MHz Tx, 2110-2155 MHz Rx, 5, 10, 15, or 20 MHz BW
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)

DIGITAL OPERATION

Protocol	ProVoice™	P25
Vocoding Method	AMBE+2™ enhanced full rate	AMBE+2 enhanced full rate and enhanced half rate
Signaling Rate (kbps)	9.6	9.6
Modulation	GFSK	Phase 1 Tx: C4FM, Rx: C4FM and WCQPSK
L3Harris Failsoft operation	Switch to site trunking mode (for L3Harris infrastructure) or P25 conventional	

ENCRYPTION

Encryption Algorithms	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)
Encryption Keys per Radio	Capable of storing 128 keys (128 AES, 64 DES)
Keying	L3Harris Key Loader, Over-the-Air Rekeying (OTAR), Motorola KVL 3000+/4000
Standards	FIPS 140-2, FIPS 197

BATTERIES

Type	Dimensions (H x W x D)	Weight	Capacity (mAh)
Li-Ion	3.0 x 2.3 x 0.9 inch	4.8 oz (136 g)	3100

ACCESSORIES

The XL-200P is available with a selection of dependable L3Harris accessories that operate in a range of environments. Several are shown below.

Headsets

The XL-200P 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-200P 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.

3-Wire Mini-Lapel Microphone

Tactical Headset

Speaker Microphones

L3Harris offers a versatile line of speaker microphones for the XL-200P.

| Standard Mic | REVO NC2 Speaker Mic | Advanced Bluetooth Speaker Mic | 500 Fire-Rated Speaker Mic |

Chargers

L3Harris offers a variety of chargers for the XL-200P: 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.

| Single-Bay Charger | 2-Bay Charger | Multi-Bay Charger* | Vehicular Charger* |

Additional Accessories Available

*Accessories unavailable in Brazil

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

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