EXCEPTIONAL COMMUNICATIONS IN SEVERE CONDITIONS

XL-200P Portable

Full-Spectrum Multiband

FEATURES

- Instant Recall of Received Audio – replays the last transmission received to avoid repetition
- Wi-Fi® Connectivity – permits simple and easy remote radio software updates
- Active Noise Cancellation – three internal microphones transmit intelligible audio and reduce background noise
- Powerful 1.5W audio amplifier – delivers best-in-class loud and clear audio
- 4-Position A-B-C-D Switch – allows access to 64 talkgroups/channels directly from the top of the radio
- Single-key DES Encryption – provides secure communications for every digital user
- Built-in GPS – for reporting user location and coordinating rapid responses to emergencies
- Integrated Bluetooth® – wireless interface to selected accessories
- Unique User Interface – top and front displays with innovative features such as Visual Zone Identification (color coding of talkgroups) to make radio operation simple and intuitive

FULL-SPECTRUM FREQUENCIES

The XL-200P is Harris' second generation full-spectrum radio. Every XL-200P radio is capable of operating on VHF, UHF, and 700/800 MHz frequencies, as well as LTE broadband. Users may purchase the portable in a single band, two bands, or multiple bands, and upgrade to add bands or LTE in the future.

DESIGNED FROM THE GROUND UP TO CONVERGE VOICE AND DATA

Designed with input from mission-critical users, the XL-200P is an entirely new radio – processor, memory, and software – that merges high speed data, LTE, and Wi-Fi with robust LMR voice to provide leading-edge connectivity.

AUDIO EXCELLENCE

The new design pairs a high-powered audio amplifier with woofer and tweeter speakers (with resonant cavities and tuned ports) to conquer noise and deliver industry-leading clear and intelligible audio.

COMPACT AND ERGONOMIC ALL-BAND + LTE RADIO

The shape of the XL-200P was based on extensive human factors research with first responders to create a radio that nestles naturally in users' hands. Controls are shaped and arranged for ease of use and optimum performance.

TOUGH MECHANICAL PACKAGE

With a rugged cast aluminum frame and tough seals, the XL-200P is constructed 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 the radio can be scrubbed with cleansers and biological sanitizers.

OPTIONAL FEATURES

- IP68 certification for immersion – 2 meters for 4 hours
- LTE broadband – upgrade for faster performance and improved data reliability on the nationwide LTE network, permitting increased productivity
- FIPS certification for enhanced security of encrypted communications
- 2-year standard warranty with options to add up to an additional 3 years

HARRIS®
assuredcommunications®

GENERAL SPECIFICATIONS

RADIO MODELS

Full Keypad:	TFT LCD w/DTMF keypad, Nav cluster, Soft Keys
Partial Keypad:	TFT LCD w/partial keypad, Nav cluster, Soft Keys

DIMENSIONS (Without Knobs and Antenna)

	Inches (w/Battery)	Millimeters (w/Battery)
Height:	5.8	148
Width:	2.3	60
Depth:	1.4	36

WEIGHT

	Ounces (w/o Bat & Ant)	Ounces (w/Bat & Ant)	Grams (w/o Bat & Ant)	Grams (w/Bat & Ant)
Radio:	10.4	16.2	296	464

HOUSING COLORS

Midnight Black — High-Visibility Yellow

INTERFACES

Front Display:	320 x 178 pixels, 1.8 in. transflective LCD, 16-bit color with backlight
Top Display:	128 x 32 pixels, 1.1 in. multi-color backlight, sunlight readable
Keypad:	Backlight, 3 soft keys, 5-way navigation key, 4 x 3 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

TRANSCEIVER

Supported Bands:	VHF & UHF & 700/800 MHz & LTE
Channel Capacity:	12,500 (1,250 per mission plan)

ENVIRONMENTAL SPECIFICATIONS

Relative Humidity:	5% @ 140°F (+60°C), 95% @ 122°F (+50°C)
Vibration:	USDA LMR Standard, Section 2.15 & MIL-STD-810G, Test Method 514.6
Drop Shock:	1.0 meter drop to concrete (exceeds TIA-603-D)
Immersion*:	2 meters for 4 hours in accordance with MIL-STD-810G/IP68

*Optional feature

	°F	°C
Operating Temperature*:	-22 to +140	-30 to +60

*Extreme low temperatures adversely affect battery life

	°F	°C
Storage Temperature *:	-40 to +176	-40 to +80

*Store batteries at +25°C ± 5°C

Altitude	Feet	Meters
Operational:	15,000	4,572
In Transit:	50,000	15,240

ELECTRICAL

Input Voltage:	7.5 VDC (nominal)

GPS/GNSS SPECIFICATIONS

Channels:	52
Tracking Sensitivity:	-166 dBm (GPS) -163 dBm (GLONASS)
Acquisition Sensitivity:	-146 dBm (GPS)
Cold Start w/-130 dBm input:	<35 seconds
Hot Start w/-130 dBm input:	<1 second

SAFETY

Hazardous Location Options:

Applied for certification for use in Class I, Division 2, Groups A, B, C, D ; Class II, Groups E, F, G ; and Class III designated locations

RoHS compliant

LMR TRANSMITTER

TYPICAL PERFORMANCE SPECIFICATIONS	FULL-SPECTRUM MULTIBAND*
Frequency Range (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 (W):	VHF: 1-6, UHF: 1-5, 700/800: 0.5-3
Rated RF Power Talkaround (W):	VHF: 1-6, UHF: 1-5, 700/800: 0.5-3
Frequency Stability (-30 to +60°C) (ppm):	±1.0
Modulation Limiting (kHz):	2.5, 4, 5 (FM)
Audio Response (dB):	+1/-3
Spurious and Harmonics (dBc):	-80, FCC Part 90
FM Hum and Noise@25 kHz (dB):	VHF: 70, UHF: 60, 700/800: 55
@12.5 kHz (dB):	VHF: 47, UHF: 47, 700/800: 45
Audio Distortion (%):	<1.25
Project 25 Modulation Fidelity (%):	1.0
Project 25 Adjacent Channel Power (dBc):	>71

*VHF and UHF product is compliant with applicable FCC narrowbanding mandate below 512 MHz.

**Future option

REGULATORY DATA

FREQUENCY RANGE (MHz)	RF OUTPUT (W)	FREQUENCY STABILITY (ppm)	FCC TYPE ACCEPTANCE NUMBER	APPLICABLE FCC RULES	INDUSTRY CANADA CERTIFICATION NUMBER	APPLICABLE INDUSTRY CANADA RULES	NTIA CERTIFICATION NUMBER
136-174	6.0	±1.0	OWDTR-0133-E	22, 74, 80, 90	3636B-0133	RSS-119	TBD
378-522	5.0	±1.0	OWDTR-0133-E	22, 74, 80, 90	3636B-0133	RSS-119	TBD
768-776	3.0	±1.0	OWDTR-0133-E	90	3636B-0133	RSS-119	TBD
798-806	3.0	±1.0	OWDTR-0133-E	90	3636B-0133	RSS-119	TBD
806-816	3.0	±1.0	OWDTR-0133-E	90	3636B-0133	RSS-119	TBD
851-861	3.0	±1.0	OWDTR-0133-E	90	3636B-0133	RSS-119	TBD
2402-2480	0.2	TBD	OWDTR-0133-E	15	3636B-0133	RSS-119	TBD
5180-5825	0.1	TBD	OWDTR-0133-E	15	3636B-0133	RSS-119	TBD

LMR RECEIVER

TYPICAL PERFORMANCE SPECIFICATIONS	FULL-SPECTRUM MULTIBAND*
Frequency Range (MHz) Option 1 (U.S.):	136-174, 378-522, 768-776, 851-861
Option 2 (International):	136-174, 378-522, 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) (ppm):	±1.0
Sensitivity (12 dB SINAD) (dBm):	VHF: -122, UHF:-121, 700: -121, 800: 120
Project 25 Reference Sensitivity @ 5% BER (dBm):	VHF: -122, UHF:-121, 700/800: -120.5
Analog Selectivity @ 25 kHz (dB):	VHF: 77, UHF: 77, 700/800: 74
@ 12.5 kHz (dB):	VHF: 71, UHF: 70, 700/800: 64
P25 Adjacent Channel Rejection @ 12.5 kHz (dB):	VHF: 66.2, UHF: 62.2, 700/800: 62.0
Intermodulation (dB):	VHF: 80, UHF: 81, 700/800: 78
Spurious and Image Rejection (dB):	VHF: 90, UHF: 87, 700: 84, 800: 80
FM Hum and Noise @ 25 kHz (dB):	VHF: -60, UHF: -60, 700/800: -55
@12.5 kHz (dB):	VHF: -55, UHF: -53, 700/800: -50
Rated/Max. Audio Output (mW):	1500/4000
Audio Distortion:	1.1% @ rated power

*VHF and UHF product is compliant with applicable FCC narrowbanding mandate below 512 MHz.
**Future option

ENVIRONMENTAL STANDARDS

STANDARD	PARAMETER	METHODS	PROCEDURES/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
	Blowing Rain	506.5	1
	Humidity	507.5	2
	Salt Fog	509.5	1
	Blowing Dust & Sand	510.5	1,2
	Explosive Atmosphere	511.5	1
	Immersion	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	IP68	

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

CELLULAR BROADBAND

LTE Protocol:	3GPP Release 9, Power Class 3 UE with RX diversity
Public Safety Broadband:	Band 14, 788-798 MHz TX, 758-768 MHz RX, 5 or 10 MHz BW*
Commercial Broadband:	Band 13, 777-787 MHz TX, 746-756 MHz RX, 5 or 10 MHz BW*
Commercial Broadband:	Band 4, 1710-1755 MHz TX, 2110-2155 MHz RX, 5, 10, 15, or 20 MHz BW*
Wi-Fi:	802.11b/g/n 2.4 GHz & 5 GHz
Bluetooth:	Bluetooth 4.0

*Future option

DIGITAL OPERATION

PROTOCOL	PROVOICE™*	P25
Vocoding Method:	AMBE + 2™ Enhanced Full Rate	AMBE + 2 Enhanced Full Rate & Enhanced Half Rate
Signaling Rate (kbps):	9.6	9.6
Modulation:	GFSK	Phase1 TX: C4FM, RX: C4FM & WCQPSK Phase 2 TX: HCPM, RX: WCQPSK

*Future option

ENCRYPTION

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

BATTERIES

TYPE	DIMENSIONS (L x W x D)	WEIGHT	LIFE (@5% Tx, 5% Rx, and 90% standby)	CAPACITY (mAH)
Li-Ion	3.0 x 2.3 x 0.9 in. (76.7 x 57.7 x 21.9 mm)	4.8 oz (136 g)	10 hours with standard battery	3100

ACCESSORIES

The XL-200P is available with a selection of dependable Harris 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, and in 2-wire or 3-wire configurations with earpiece, microphone, and PTT.

Tactical Headset

3-Wire Mini-Lapel Microphone

CARRYING CASES

Harris offers a versatile line of carrying cases for the XL-200P full-spectrum multiband radio. Options include a standard belt clip and premium belt loop, both of which afford the radio user a low-profile, integrated carrying option. In addition, a premium leather holster is available for attaching to a belt or wearing with the premium leather shoulder strap.

Belt Clip

Leather Carrying Case

CHARGERS

Harris offers a variety of chargers for the XL-200P: Single-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

Multi-Bay Charger

Vehicular Charger

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.

HARRIS®

Public Safety and Professional Communications
221 Jefferson Ridge Parkway
Lynchburg, VA 24501 USA

1-800-368-3277 (+1-434-455-6403)

www.pspc.harris.com