



XL CONVERGE™ 200Pi

Multiband LMR Meeting Intrinsic Safety Guidelines

The XL 200Pi is a multiband radio built to meet UL Class 1, Division 1 (C1D1) standards for Intrinsic Safety, ensuring that it performs flawlessly in even the most dangerous operations.

Ideal for fire departments, utilities, mining, hazmat responders, and oil and gas workers, the XL 200Pi delivers advanced connectivity with robust land mobile radio (LMR) voice and data over VHF, UHF or 700/800 frequencies. Wi-Fi®, Bluetooth® and GPS are included as standard. This portable is designed to protect against water and dust penetration. Compact and ergonomic, the XL 200Pi fits naturally into users' hands, with controls shaped for fast, easy operation.

RELENTLESSLY RELIABLE

XL Radios run on systems that double down on redundancy, champion open networks, and connect seamlessly with all P25-compliant organizations.

POINT-TO-POINT SECURE

Our AES-256 encryption provides an end-to-end secure configuration, keeping you safe from threats.

BACKED WITH ALL-IN, 24/7 SUPPORT

Our service packages get your radios up and running with in-field preventative maintenance and automatic software upgrades.

Key Benefits:

- > Multiband portable meeting UL's C1D1 standards for intrinsic safety
- > Robust connectivity with VHF, UHF and 700/800 frequency capabilities
- > Exceeds MIL-SPEC 80 standards
- > Advanced noise cancellation technology
- > Multiple encryption options including single-key AES standard

SPECIFICATIONS FOR: XL CONVERGE 200Pi – INTRINSICALLY SAFE LAND MOBILE 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 1.6 in (148.0 x 60.0 x 42.0 mm)	
Weight	17.9 oz (507 g) w/Battery and Antenna	10.4 oz (296 g) w/o Battery and Antenna
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 transfective 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	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 1.0 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 GPS 52 -166 (GPS), -163 (GLONASS) -146 (GPS) <35 seconds <1 second	
Safety: Hazardous Location Options RoHS Compliant	U.S.: Class 1, Division 1, Groups C and D; Class II, Division 1, Groups E, F and G; Class III, Division 1 hazardous locations; Class 1, Division 2, Groups A, B, C and D Canada: Class 1, Division 2, Groups A, B, C and D hazardous locations	

¹ Optional feature

² Extreme low temperatures adversely affect battery life

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/Non-rebanded)	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 CONVERGE 200Pi – INTRINSICALLY SAFE LAND MOBILE 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.
136-174 MHz	6 W	±1.0 ppm	OWDTR-0144-E, OWDTR-0146-E	22, 74, 80, 90	3636B-0144, 3636B-0146	RSS-119	SPS-217 49/1
378-522 MHz	5 W	±1.0 ppm	OWDTR-0144-E, OWDTR-0146-E	22, 74, 80, 90	3636B-0144, 3636B-0146	RSS-119	SPS-217 49/1
768-776 MHz	3 W	±1.0 ppm	OWDTR-0144-E, OWDTR-0146-E	90	3636B-0144, 3636B-0146	RSS-119	NA
798-806 MHz	3 W	±1.0 ppm	OWDTR-0144-E, OWDTR-0146-E	90	3636B-0144, 3636B-0146	RSS-119	NA
806-816 MHz	3 W	±1.0 ppm	OWDTR-0144-E	90	3636B-0144	RSS-119	NA
806-825 MHz	3 W	±1.0 ppm	OWDTR-0146-E	90	3636B-0146	RSS-119	NA
851-861 MHz	3 W	±1.0 ppm	OWDTR-0144-E	90	3636B-0144	RSS-119	NA
851-869 MHz	3 W	±1.0 ppm	OWDTR-0146-E	90	3636B-0144	RSS-119	NA
2402-2480	0.2	NA	OWDTR-0144-E, OWDTR-0146-E	15	3636B-0144, 3636B-0146	RSS-119	NA
5180-5825	0.1	NA	OWDTR-0144-E, OWDTR-0146-E	15	3636B-0144, 3636B-0146	RSS-119	NA

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

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

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

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

**Optional feature

SPECIFICATIONS FOR: XL CONVERGE 200Pi – INTRINSICALLY SAFE LAND MOBILE RADIO

ENVIRONMENTAL STANDARD (Continued)			
Applicable MIL-STD	Parameter	Methods	Procedure/Categories
	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

**Optional feature

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)

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

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	Number of Encryption Keys per Keystore (up to 5 keystores per radio): 128 AES, 64 DES, 5 LLA, 8 Encryption Lite (ARC4), 4 AES UKEK, 4 DES UKEK
Keying	L3Harris Key Loader, Over-the-Air-Rekeying (OTAR), for respective UKEKs, Motorola KVL 3000+/4000/5000
Standards	FIPS 140-2 Level 1, FIPS 197


BATTERIES			
Type	Dimensions (H x W x D)	Weight	Capacity (mAh)
Li-Ion	3.0 x 2.3 x 1.1 in	6.1 oz (174 g)	3100

ACCESSORIES


Explore the XL 200Pi with reliable C1D1-rated L3Harris accessories for diverse environments. Learn more at [L3Harris.com](#).

Chargers


L3Harris offers a variety of chargers for the XL 200Pi. These chargers quickly and safely charge batteries in approximately 1 to 4 hours.



XL Single-Bay+



XL Premium 6-Bay Charger



Premium Vehicular Charger

Additional Accessories Available

Standard speaker microphones, earphones for standard speaker microphones, belt clip, Lithium-Ion battery, PC programming software and cables and antennas.

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

Non-Export Controlled Information

L3Harris Technologies is the Trusted Disruptor in the defense industry. With customers’ mission-critical needs always in mind, our 50,000 employees deliver end-to-end technology solutions connecting the space, air, land, sea and cyber domains in the interest of national security.