

# For a radio you can rely on, no matter where the mission may take you, count on the XL Converge.

This radio redefines convergence. What that means to those who use it is simple—never having to second-guess the quality of your connection. The XL Converge™ 200P is a multiband, LTE-capable P25 radio that packs industry-leading technology into a tough, user-friendly frame. Advanced data sharing with built-in Wi-Fi and GPS maximize situational awareness. Crystal clear audio cuts through the background, courtesy of custom speakers and advanced noise cancellation. Ergonmic design and an intuitive interface makes use second-nature, keeping your focus off your radio and on the task at hand. Just like the rest of our XL Radios, the XL Converge™ 200P is:

### RELENTLESSLY RELIABLE

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

# POINT-TO-POINT SECURE

Our AES secure configurations are ironclad, keeping your systems safe from threats.

# BACKED WITH ALL-IN, 24/7 SUPPORT

Our service packages get your radios up and running and keep them running with preventative maintenance and automatic software upgrades.

# Anywhere, anyhow, always-on connection:

- Multiband, LTE-capable, P25 radios
- > Built-in Wi-Fi®, Bluetooth® and GPS
- > Advanced data sharing
- > Secure voice and data encryption
- > Crystal clear audio with advanced noise cancellation
- > Built to operate in harsh conditions
- > Long battery life
- > Intuitive and easy to use
- > Ergonomic, glove-friendly design



#### SPECIFICATIONS FOR: XL CONVERGE 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, Antenna and LTE Modem         w/Battery and Antenna         w/o Battery and Antenna           18.2 oz (516 g)         16.2 oz (464 g)         10.4 oz (296 g)			
Housing Colors	Midnight Black, High-Visibility Yellow and High-Vis	ibility Green		
Interfaces: Front Display Top Display Keypad Buttons Tx / Rx Indicator	320 x 178 pixels, 1.8 inch transflective LCD, 16-bit 128 x 32 pixels, 1.1 inch multi-color backlight, sur Backlight, 3 soft keys, 5-way navigation key, full DT Large PTT button, on/off knob, volume knob, red e concentric switch, 4-position toggle switch, 3 prog Multi-colored LEDs	light readable MF keypad mergency button, 16-position t	op-mounted rotary knob, 2-position	
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 and 700/800 MHz and LTE (optional)	Channel Capacity 12,500 (1,250 per mission plan)		
Environmental: Relative Humidity Vibration Drop Shock Immersion <sup>1</sup>	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 <sup>2</sup>	-22° to +140°F (-30° to +60°C)			
Storage Temperature <sup>3</sup>	-40° to +176°F (-40° to +80°C)			
Altitude	Operational 15,000 feet (4,572 meters)	<b>In Transit</b> 40,000 feet (12,192 meters	s)	
Electrical Input Voltage	7.5 VDC (nominal)	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	

<sup>&</sup>lt;sup>1</sup> Optional feature

<sup>&</sup>lt;sup>3</sup> 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

 $<sup>{}^{\</sup>star}\text{Full-spectrum multiband VHF and UHF product is compliant with applicable FCC narrowbanding mandate below 512\,MHz}$ 



<sup>&</sup>lt;sup>2</sup> Extreme low temperatures adversely affect battery life

# SPECIFICATIONS FOR: XL CONVERGE 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.
136-174 MHz	6 W	±1.0 ppm	OWDTR-0133-E, OWDTR-0145-E	22, 74, 80, 90	3636B-0133, 3636B-0145	RSS-119	SPS-217 49/1
378-522 MHz	5 W	±1.0 ppm	OWDTR-0133-E, OWDTR-0145-E	22, 74, 80, 90	3636B-0133, 3636B-0145	RSS-119	SPS-217 49/1
768-776 MHz	3 W	±1.0 ppm	OWDTR-0133-E, OWDTR-0145-E	90	3636B-0133, 3636B-0145	RSS-119	
798-806 MHz	3 W	±1.0 ppm	OWDTR-0133-E, OWDTR-0145-E	90	3636B-0133, 3636B-0145	RSS-119	
806-816 MHz	3 W	±1.0 ppm	OWDTR-0133-E	90	3636B-0133	RSS-119	
806-825 MHz	3 W	±1.0 ppm	OWDTR-0145-E	90	3636B-0145	RSS-119	
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	15	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	

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 (narr	owband), 6.25 equiv (TDMA P25 Phas	se 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	N/A	N/A	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

<sup>\*</sup>Full-spectrum multiband VHF and UHF product is compliant with applicable FCC narrowbanding mandate below 512 MHz

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 immersio	n in water**	IP68

<sup>\*</sup>Also meets equivalent superseded MIL-STD-810D, -E and -F

BROADBAND	)
LTE Protocol	3GPP Release 11, Category 12, Power Class 3 UE with support for QoS QCI
North America LTE Option	FCC ID: N7NEM75S 4G LTE Bands: B2, B4, B5, B12, B13, B14, B17, B29*, B30*, B66 3G Bands: B2, B5 Carrier Certification: FirstNet, AT&T, Verizon
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)
*Downlink only f	or Carrier Aggregation



<sup>\*\*</sup>Optional feature

#### SPECIFICATIONS FOR: XL CONVERGE 200P PORTABLE FULL—SPECTRUM MULTIBAND RADIO

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			
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 192 keys (128 AES, 64 DES), store up to 5 UKEKs per radio
Keying	L3Harris Key Loader, Over-the-Air Rekeying (OTAR) for respective UKEKs, Motorola KVL 3000+/4000
Standards	FIPS 140-2, FIPS 197

BATTERIES				
Туре	Dimensions (H x W x D)	Weight	Capacity (mAh)	
Li-Ion	3.0 x 2.3 x 0.9 in	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\*

MANAGEMENT

SECURITY



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.

\*Accessories unavailable in Brazil

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SAFETY

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