L3HARRIS®
FAST. FORWARD.

XL CONNECT™ 95P

Flexible. Affordable. Unstoppable.

In today's challenging environment, customers told us they wanted high-quality L3Harris radio technology but in a more affordable configuration.

You spoke, we listened. We packed the XL Connect 95P with the right features to meet your need for unstoppable and secure critical communication connections. With Wi-Fi®-enabled voice and device management, you can communicate just about anywhere without ever leaving your system. The XL Connect 95P has features typically only found in higher priced radios, like GPS, Bluetooth® connectivity and instant recall. Just like the rest of our XL radios, the XL Connect 95P is:

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 keep your radios up and running with in-field preventative maintenance and software upgrades.

Key Benefits:

- Wi-Fi enabled voice and device management
- Features formerly only available in higher-priced radios like GPS, Bluetooth and instant recall
- Encrypted voice and data for secure communications
- The right features at an affordable price
- Multimode solution supporting P25, EDACS® and ProVoice™

SPECIFICATIONS FOR: XL CONNECT 95 PORTABLE RADIO

GENERAL	
Specifications	
Radio Model Numbers **XN-PF78M** **XN-PFVUM**	 XL-95P 700/800 MHz Portable radio XL-95P VHF & UHF Dual band Portable radio
Full Keypad	Color LCD and DTMF keypad
Dimensions (H x W x D): **(without antenna, battery and knobs)**	5.9 x 2.4 x 1.9 in (149.6 x 62.0 x 47.2 mm)
Weight (without antenna and battery)	10.9 oz (310g)
Housing Color	Midnight Black
Environmental Specifications	
Relative Humidity	95% @ 140°F (+60°C)
Vibration	TIA-603-D Vibration Stability (PAR 2.3.4 and 3.3.4)
Drop Shock	1.5 m drop to concrete (exceeds TIA-603-C)
Immersion[1]	2 m for 4 hrs in accordance with MIL-STD-810G / IP68 (per IEC60529)
Operating Temperature[1]	-22° to +140°F (-30° to +60°C)
Storage Temperature	-40° to +176°F (-40° to +80°C)
Store batteries at the following temperatures:	
Li-Ion	-40° to + 176°F (-40° to +80°C)
Altitude	
Operational	15,000 ft (4,572 m)
In Transit	50,000 ft (15,240 m)
Electrical	
Input Voltage	7.5 VDC (nominal)
GPS/GNSS Specifications:[2] **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
Wi-Fi[2]	802.11 b/g/n 2.4 GHz and 5 GHz; supports 24 preconfigured and 8 user configured networks preconfigured and 8 user configured networks
Bluetooth	Bluetooth 4.0 (128-bit encryption)
Safety	
HAZLOC 1	UL certified to UL 121201, CAN/CSA C22.2 No. 213 standards, Non-incendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations.
RoHS compliant	

[1]Extremely low temperatures adversely affect battery life
[2] Optional Feature

TRANSMITTER			
Typical Performance Specifications	**VHF**	**UHF**	**700/800**
Frequency Range (MHz): **(US)** **(International)**	136-174 MHz	378-522 MHz	 768-776, 798-806, 806-816, 851-861 763-776, 793-806, 806-825, 851-870
Rated RF Power (W)	6 (Trnk & Talkaround)	5 (Trnk & Talkaround)	3 (Trnk & Talkaround)
Frequency Stability (-30°C to +60°C, +25°C Ref) (ppm)	±1.0	±1 .0	±0.6
Frequency Separation (MHz)	Full Bandwidth	Full Bandwidth	Full Bandwidth (within 700 or 800 MHz band)
Modulation Deviation (kHz)	5.0 (wideband*) 2.5 (narrowband)	5.0 (wideband*) 2.5 (narrowband)	5.0 (wideband*), 4.0 (NPSPAC) 2.5 (narrowband)
FM Hum and Noise Companion Receiver (dB)	-45 @ 25 kHz -43 @ 12.5 kHz	-45 @ 25 kHz -43 @ 12.5 kHz	-44 (700 MHz) -47 (800 MHz NPSPAC) -48 (800 MHz non-NPSPAC)
Spurious and Harmonics (dBm / dBc)	-36/-75	-55 / -90	-55/90
Audio Response (dB)	+1/-3	+1/-3	+1/-3

TRANSMITTER			
Audio Distortion (1 kHz tone): **@ 3 kHz deviation** **@ 2.4 kHz deviation** **@ 1.5 kHz deviation**	2%	2%	 1% (800 MHz non-NPSPAC) 1% (800 MHz NPSPAC) 1% (700 MHz)
Project 25 Modulation Fidelity (%)	3	3	1
Project 25 Adjacent Channel Power (dBc)	>67	>67	73

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

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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**
136-174; 378-522	6 (136-174 MHz) 5 (378-522 MHz)	±1.0	TBD	22, 74, 80, 90	TBD	RSS-119
763-775; 793-805; 806-825; 851-870	3	0.2	OWDTR 0162-E	15C, 15E, 90	--	--
768-776; 798-806; 806-824; 851-869	3		**--**	**--**	3636B-0162	RSS-119

RECEIVER			
Typical Performance Specifications	**VHF**	**UHF**	**700/800 MHz**
Frequency Range (MHz): **(US)** **(International)**	136-174 MHz	378-522 MHz	768-776, 851-861 763-776, 851-870
Frequency Separation (MHz)	Full Bandwidth	Full Bandwidth	Full Bandwidth (within 700 or 800 MHz band)
Channel Spacing (kHz)	25 (wideband*) 12.5 (narrowband)	25 (wideband*) 12.5 (narrowband)	25 (wideband*) 12.5 (narrowband)
Frequency Stability (-30 to +60°C, +25 °C Ref) (ppm)	±1.0	±1.0	±1.5
Sensitivity (12 dB SINAD) (µV / dBm)	0.25/-119.0	0.25/-119.0	0.25/-119.0
Adjacent Channel Selectivity: **@ 25 kHz (dB)** **@ 12.5 kHz (dB)**	 >70 >60	 >77 >69	 75 (800 MHz non-NPSPAC) 67 (700 MHz)
Intermodulation (dB)	>77	>77	76
Spurious and Image Rejection (dB)	>90	>77	>74
FM Hum and Noise (dB)	-50 @ 25 kHz -45 @ 12.5 kHz	-50 @ 25 kHz -45 @ 12.5 kHz	-44 (700 MHz) -53 (800 MHz NPSPAC) -54 (800 MHz wideband)
Audio Output (mW)	500 rated (3800 max)	500 rated (3800 max)	500 rated (3800 max)
Audio Distortion @ Rated Power (%)	1.5	1.5	1.5
Project 25 Reference Sensitivity @ 5% BER (µV / dBm)	0.25/-119	0.25/-119	0.25/-119
Project 25 Adjacent Channel Rejection (dB)	60	60	60

ENVIRONMENTAL STANDARD			
Standard	**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-B
	Solar Radiation	505.5	2
	Blowing Rain	506.5	1
	Humidity	507.5	2
	Salt Fog	509.5	1
	Blowing Dust	510.5	1
	Immersion**	512.5	1
	Vibration (Minimum Integrity)	514.6	1, Category 24

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ENVIRONMENTAL STANDARD			
	Vibration (Basic Transportation)	514.6	1, Category 4
	Shock (Functional / Basic)	516.6	1
	Shock (Transit Drop)	516.6	4
IEC 60529	Dust tight, Continuous Immersion	IP68	
TIA-603-D	Vibration (10-60 Hz)	PAR 2.3.4 and 3.3.4	
TIA-603-C* **	Shock (1-meter drop)	Paragraph 3.3.5.3	

*Also meets equivalent superseded MIL-STD-810D, E and F
**XL Connect 95P immersion model only. Available option that must be ordered. Additional certification for water intrusion with water depth of 2 meters for 4 hours
***Environmental test certification of 1.5-meter drop shock to concrete using parameters of TIA-603-C 1.0-meter drop shock with additional height

DIGITAL OPERATION		
Protocol	**P25**	**ProVoice™**
Vocoding Method	AMBE+2 Enhanced Full Rate &Enhanced Half Rate	AMBE+2 ProVoice™ Enhanced Full Rate
Signaling Rate (kbps)	9.6	9.6
Modulation	Phase1 TX: C4FM, RX: C4FM & CQPSK Phase 2 TX: HCPM, RX: HDCQPSK	GFSK
L3Harris Failsoft	Switch to site Trunking mode (for L3Harris infrastructure) or P25 Conventional Failsoft for Motorola	

ENCRYPTION	
Encryption Algorithms	Voice Encryption: Single-key AES/DES, Multiple-key AES/DES, DES-CFB, Encryption Lite (ARC4), 256-bit AES P25, 64-bit DES Control Channel Encryption: 128-bit AES (LLA)
Encryption Keys per Radio	Capable of storing up to 1,045 keys
Standards	FIPS 140-2 Level 1, FIPS 197

BATTERY				
Type	**Dimensions (H x W x D)**	**Weight**	**Life (@5% Tx, 5% Rx and 90% standby)**	**Capacity (mAh)**
Li-Ion	4.42 x 2.44 x 0.83 in	5.1 oz (145 g)	10 hrs	3100

L3HARRIS®

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