



L3HARRIS™
FAST. FORWARD.



XL CONNECT™ 45P

Affordable, Flexible, Unstoppable.

The XL Connect™ 45P is engineered for audio excellence and a simplified user experience.

We included all the essentials you need for critical connectivity and an affordable path to leading-edge communications. You can also count on this P25 portable to provide invaluable, customer-proven inter-agency interoperability.

PROVEN QUALITY FOR CRITICAL COMMUNICATIONS

Built to meet military requirements plus dual-microphone noise cancellation technology for clear communications in noisy environments.

RELENTLESSLY RELIABLE

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

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.

Reliable Performance. Audio Excellence.

A member of the XL Connect™ radio series.

- > Based on proven XL quality and compatible with XG accessories
- > Meets military standards for durability
- > Dual-microphone noise cancellation for advanced clarity
- > Sharp, bright color display for visibility
- > Field-repairable, software defined for easy updates and new capabilities
- > Single-key AES/DES encryption and Encryption Lite for voice and data protection
- > WiFi-enabled voice and device management

SPECIFICATIONS FOR: XL CONNECT 45 PORTABLE RADIO

GENERAL	
Radio Model: XK-PF78B	
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 (310 g)
Housing Color	Gray
Environmental Specifications	
Relative Humidity	95% @ 140°F (+60°C)
Vibration	9.2 g (per U.S. Forest Service)
Drop Shock	1.5 m drop to concrete (exceeds TIA-603-C)
Ingress Protection	IP66
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)
RoHS compliant	

¹Extremely low temperatures adversely affect battery life

TRANSMITTER	
Typical Performance Specifications	700/800
Frequency Range (MHz): (U.S.) (International)	768-776, 798-806, 806-816, 851-861 763-776, 793-806, 806-825, 851-870
Rated RF Power (W)	3 (Trnk & Talkaround)
Frequency Stability (-30°C to +60°C, +25°C Ref) (ppm)	±0.6
Frequency Separation (MHz)	Full Bandwidth (within 700 or 800 MHz band)
Modulation Deviation (kHz)	5.0 (wideband*), 4.0 (NPSPAC) 2.5 (narrowband)
FM Hum and Noise Companion Receiver (dB)	44 (700 MHz) 47 (800 MHz NPSPAC) 48 (800 MHz non-NPSPAC)
Spurious and Harmonics (dBm / dBc)	-55/90
Audio Response (dB)	+1/-3
Audio Distortion (1 kHz tone): @ 3 kHz deviation @ 2.4 kHz deviation @ 1.5 kHz deviation	1% (800 MHz non-NPSPAC) 1% (800 MHz NPSPAC) 1% (700 MHz)
Project 25 Modulation Fidelity (%)	1
Project 25 Adjacent Channel Power (dBc)	73

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
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

SPECIFICATIONS FOR: XL CONNECT 45 PORTABLE RADIO

RECEIVER	
Typical Performance Specifications	700/800 MHz
Frequency Range (MHz): (US) (International)	768-776, 851-861 763-776, 851-870
Frequency Separation (MHz)	Full Bandwidth (within 700 or 800 MHz band)
Channel Spacing (kHz)	25 (wideband*) 12.5 (narrowband)
Frequency Stability (-30 to +60°C, +25°C Ref) (ppm)	±1.5
Sensitivity (12 dB SINAD) (µV / dBm)	0.25/-119.0
Adjacent Channel Selectivity: @ 25 kHz (dB) @ 12.5 kHz (dB)	75 (800 MHz non-NPSPAC) 67 (700 MHz)
Intermodulation (dB)	75
Spurious and Image Rejection (dB)	>75
FM Hum and Noise (dB)	44 (700 MHz) 53 (800 MHz NPSPAC) 54 (800 MHz wideband)
Audio Output (mW)	500 rated (3800 max)
Audio Distortion @ Rated Power (%)	1.5
Project 25 Reference Sensitivity @ 5% BER (µV / dBm)	0.25/-119
Project 25 Adjacent Channel Rejection (dB)	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
	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
IEC 60529	Dust tight	IP66	
U.S. Forest Service	Vibration (10-60 Hz)	USDA LMR Standard Section 2.15	
TIA-603-C**	Shock (1-meter drop)	Paragraph 3.3.5.3	

*Also meets equivalent superseded MIL-STD-810D, E and F
**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
Vocoding Method	AMBE+2 Enhanced Full Rate & Enhanced Half Rate
Signaling Rate (kbps)	9.6
Modulation	Phase1 TX: C4FM, RX: C4FM & WCQPSK Phase 2 TX: HCPM, RX: WCQPSK

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ENCRYPTION

Encryption Algorithms	Voice Encryption: Single-key AES / DES, DES-OFB, Encryption Lite (ARC4)* 256-bit AES P25, 64-bit DES Control Channel Encryption: 128-bit AES (LLA)
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*Interoperates with commonly available ARC4 encryption algorithms.

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

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XL Connect 45P

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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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