



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 |

SPECIFICATIONS FOR: XL CONNECT 45 PORTABLE RADIO

| 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) |

*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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