



XG-15P PORTABLE TWO-WAY P25-CAPABLE RADIO

RUGGED, COST-EFFECTIVE P25 SOLUTION

KEY FEATURES

Outstanding audio quality even in noisy environments

Cost-effective solution for P25 transitions

Software-defined architecture supports in-field updates

IP54-rated for protection from dust and water

P25 conventional and trunking options are available

The Harris XG-15P is a cost-effective two-way portable delivering outstanding voice quality in challenging environments. Weighing in at 13.8 ounces with a Li-Ion battery, this two-way portable is one of the lightest P25-capable radios available today.

This dual-mode, wideband, narrowband portable features a software-defined architecture, supporting seamless in-field upgrades to different operating modes, including P25 Phase 2 trunking. The XG-15P features include a compact, ergonomic design, with knobs and keypad buttons designed to protect from impact and incidental contact, while remaining easily managed by users wearing gloves.

IP54-rated for protection against dust and water, the XG-15P secures communications through single-key DES encryption and Encryption Lite. An AMBE+2™ vocoder reduces distortions and ambient noise to provide always-clear communications. The portable also has an instant recall feature so users avoid repetition by replaying only the last transmission received.

Every Harris XG-15P includes an antenna, single-bay charger, Li-Ion battery and belt clip. Radio packages can be customized for P25 conventional, P25 Phase 1 trunking and P25 Phase 2 trunking.

SPECIFICATIONS FOR: XG-15P PORTABLE TWO-WAY RADIO

GENERAL

Radio Models	Full keypad (Dot matrix LCD and DTMF keypad)
Dimensions (H x W x D):	
Without antenna, battery and knobs	5.37 x 2.44 x 1.67 in. (136.5 x 62.0 x 42.5 mm)
Weight:	
Without antenna and battery	85 oz. (241.87 g)
Housing Colors	Gray
Environmental:	
Relative Humidity	90% @ 122° F (+50° C)
Vibration	9.2 G (per US Forest Service)
Drop Shock	1.0 meter drop to concrete (per TIA-603-C)
Ingress Protection	IP54
Operating Temperature*	-22° F to +140° F (-30° C to +60° C)
Storage Temperature*	-40° F to +176° F (-40° C to +80° C)
Altitude:	
Operational	15,000 feet (4,572 meters)
In Transit	50,000 feet (15,240 meters)
Electrical:	
Input Voltage	7.5 VDC (nominal)
Safety	RoHS compliant

*Extremely low temperatures adversely affect battery life

**Store batteries at +25° C ± 5° C

TRANSMITTER

Frequency Bands	VHF	UHF	700/800 MHz
Frequency Ranges (MHz)	136-174	440-512	768-776, 798-806, 806-816, 851-861
Rated RF Power (W)	5	5	3 (trunk and talkaround)
Frequency Stability (-30° to +60° C, +25° C ref)	±1.5 ppm	±1.5 ppm	±1.5 ppm
Frequency Separation (MHz)	Full Bandwidth	Full Bandwidth	NA
Modulation Deviation (kHz)	5.0 (wideband*) 2.5 (narrowband)	5.0 (wideband*) 2.5 (narrowband)	2.5, 4, or 5 FM
FM Hum and Noise Companion Receiver (dB)	53 (wideband*) 51 (narrowband)	51 (wideband*) 47 (narrowband)	44 (700 MHz) 47 (800 MHz NPSPAC) 48 (800 MHz non-NPSPAC)
Spurious and Harmonics (dBm/dBc)	-38/-75	-51/-88	-36.5/71.5
Audio Response (dB)	+1/-3	+1/-3	Meets TIA-603-C Section 3.2.6
Audio Distortion (1 kHz tone):			
@ 3 kHz deviation	0.6% (wideband)	0.5% (wideband)	1% (800 MHz non-NPSPAC)
@ 2.4 kHz deviation	NA	NA	1% (800 MHz NPSPAC)
@ 1.5 kHz deviation	0.7% (narrowband)	0.7% (narrowband)	1% (700 MHz)
Project 25 Modulation Fidelity	0.8%	1.4%	1%
Project 25 Adjacent Channel Power (dBc)	74	72	73

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

REGULATORY DATA

Frequency Range	RF Output	Frequency Stability	FCC Type Acceptance No.	Applicable FCC Rules	Industry Canada Certification No.	Applicable Industry Canada Rules
136-174 MHz	0.5-5 W	1.5 ppm	OWDTR-0067-E	22, 80, 90	3636B-0067	RSS-119
768-861 MHz	3 W	1.5 ppm	OWDTR-0134-E	90	3636B-0134	RSS-119

To be provided upon receipt of FCC, Industry Canada, and European type approvals for UHF. This equipment is subject to the FCC rules. The equipment will comply with the appropriate rules before delivery to the buyer.

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

RECEIVER

Frequency Bands	VHF	UHF	700/800 MHz
Frequency Ranges (MHz)	136-174	440-512	768-776, 851-861
Frequency Separation (MHz)	Full Bandwidth	Full Bandwidth	NA
Channel Spacing (kHz)	25/30 (wideband*) 12.5/15 (narrowband)	25 (wideband*) 12.5 (narrowband)	12.5, 25, PLL steps
Frequency Stability (-30° to +60° C, +25° C ref)	±1.5 ppm	±1.5 ppm	±1.5 ppm
Sensitivity: @ 12 dB SINAD (µV/dBm)	0.2/-121 (wideband*) 0.2/-121 (narrowband)	0.2/-121 (wideband*) 0.2/-121 (narrowband)	0.21/-121 (700 MHz) 0.22/-120 (800 MHz NPSPAC) 0.21/-121 (800 MHz non-NPSPAC)
Adjacent Channel Selectivity: @ 25 kHz (dB) @ 12.5 kHz (dB)	82 (wideband*) 70 (narrowband)	77 (wideband*) 69 (narrowband)	75 (800 MHz non-NPSPAC) 67 (700 MHz)
Offset Channel Selectivity: @ NPSPAC (dB)	NA	NA	30
Intermodulation (dB)	79	78	75
Spurious and Image Rejection (dB)	83	79	90
FM Hum and Noise (dB)	54 (wideband*) 47 (narrowband)	53 (wideband*) 49 (narrowband)	45 (700 MHz) 52 (800 MHz NPSPAC) 54 (800 MHz non-NPSPAC)
Audio Output - Rated (mW)	500	500	500
Audio Distortion @ Rated Power (%)	1.5	1.2	1.5
Project 25 Reference Sensitivity: @ 5% BER (µV/dBm)	0.22/-120	0.22/-120	0.23/-120
Project 25 Adjacent Channel Rejection (dB)	67	64	64

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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	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-protected and splashing water	IP54	
US 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

ENCRYPTION

Encryption Algorithms	DES, AES 128-bit (for Link Layer Authentication only, no AES voice encryption) Encryption Lite (40-bit)*
Encryption Keys per Radio	Single-key DES

*Option included as standard with the radio and interoperates with commonly available ARC4 encryption algorithms

BATTERIES

Type	Dimensions (H x W x D)	Weight	Life	Capacity (mAh)
Li-Ion	4.42 x 2.44 x 0.83 in.	5.1 oz. (145 g)	10 hours @ 5% Tx, 5% Rx, and 90% standby	2400

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ACCESSORIES

The XG-15P offers a full complement of accessories that operate under the extreme conditions experienced by public service users and first responders. Several accessories are shown below.

Audio Accessories

The XG-15P can be used with a wide variety of audio accessories including speaker microphones, headsets, and covert audio accessories to provide a complete user-gear solution for the public service and first responder markets. Covert audio kits are available in black or beige, and in 2-wire or 3-wire configurations with earpiece, microphone and PTT.



Speaker Microphone



Fire Speaker Microphone



3-Wire Mini-Lapel Microphone

Carrying Cases

Harris offers a versatile line of carrying cases for the XG-15P radio. Every XG-15P radio package ships with a standard belt clip. Optional accessories include a premium belt loop which affords the radio user a low-profile, integrated carrying option. In addition, a premium leather holster is available for attaching to a belt or wearing with the premium leather shoulder strap.



Nylon Carrying Case



Belt Clip



Leather Carrying Case

Adapters

The XG-15P can be used with two types of adapters: Bluetooth® Adapter and GPS Adapter. The Bluetooth Adapter allows the radio to interface with Harris Bluetooth accessories. The GPS Adapter enables the radio to transmit a user's geographic location to dispatchers to provide quick and accurate position tracking. With a GPS Adapter, there is no need for an external GPS speaker microphone.



GPS Adapter



Bluetooth Adapter

Additional Accessories Available

Antennas, Bluetooth speaker microphones, Bluetooth covert earpieces, Lithium batteries, PC programming software, and cables are available.

About Harris Corporation

Harris Corporation is a leading technology innovator that creates mission-critical solutions that connect, inform and protect the world. The company's advanced technology provides information and insight to customers operating in demanding environments—from ocean to orbit and everywhere in between. Harris has approximately \$7.5 billion in annualized revenue and supports customers in more than 100 countries through four customer-focused business segments: Communication Systems, Space and Intelligence Systems, Electronic Systems and Critical Networks.

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INFORM AND PROTECT™