ACCESSORIES

The Unity XG-100P offers a full complement of accessories that operate under the extreme conditions experienced by first responders. Several are shown below.

NOTE

The XG-100P 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 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 XG-100P can be used with Bone Conducting Skull Headsets and Throat Microphone/Headset Kits. Covert audio kits are available in black or beige, and in 2-wire or 3-wire configurations with earpieces, microphone, and PTT.

Speaker Microphone  Fire Speaker Microphone  Tactical Headset  3-Wire Mini-Lapel Microphone

Chargers

Harris offers a versatile line of carrying cases for the XG-100P radio. Options include a standard belt clip and premium belt loop, both of which afford 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.

CARRYING CASES

Harris offers a variety of chargers for the XG-100P: Single-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  Multi-Bay Charger  Vehicular Charger

Additional Accessories Available

Antennas, Bluetooth speaker microphones, Bluetooth covert earpieces, microphones, 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 $8 billion in annual revenue and supports customers in 125 countries through four customer-focused business segments: Communication Systems, Space and Intelligence Systems, Electronic Systems, and Critical Networks.

FLORIDA  |  NEW YORK  |  VIRGINIA  |  BRAZIL  |  UNITED KINGDOM  |  UAE  |  SINGAPORE

UNITY® XG-100P PORTABLE
FULL-SPECTRUM MULTIBAND

The Unity XG-100P full-spectrum multiband radio delivers unprecedented interoperability, ease of use, and advanced capabilities. By supporting both digital P25 secure and analog conventional communications across the VHF, UHF, and 700/800 MHz bands in a single radio, first responders can communicate across multiple jurisdictions and agencies operating on multiple frequencies and systems.

FUTURE READY

The XG-100P is a safe investment that agencies can rely on as transitions occur to P25 technology. The radio supports Phase 2 trunking.

NEXT GENERATION USER INTERFACE

The user-centric design of the XG-100P offers significant capability and flexibility beyond push-to-talk.

- Intuitive menu-driven graphical user interface with full-color display
- Large 5-way navigation key and soft keys
- User defined switch
- Large knobs and configurable top display
- Front-panel programming

RUGGED FOR FIELD USE

This rugged portable is engineered to provide reliable and dependable communications in mission critical conditions. The XG-100P meets MIL-STD-810G standards for durability and immersion.

FEATURES

Built-in GPS provides user geographical location effortlessly at no additional cost.

- Designed to scan continuously across all bands, voice modes, and encryption types, the XG-100P provides users exceptional capability and interoperability in a rugged radio.
- Bluetooth is included as standard for interfacing with wireless audio accessories.

The 2-position and 3-position concentric switch(es) allow access to 48 talkgroups/channels directly from the top of the radio while toggling between clear and secure modes.

HARRIS® TECHNOLOGY TO CONNECT, INFORM and PROTECT

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GENERAL SPECIFICATIONS

Radio Models
- Full Keypad: TFT LED w/DTMF keypad, Nav cluster, Soft Keys
- Dimensions (Without Knobs, Antenna, and Battery):
  - Inches: 3.05
  - Millimeters: 77.5
- Weight:
  - Ounces: 16.8
  - Grams: 476.8

Housing Colors: Black-Gray

REFERENCES
- Front Display:
  - 176 x 200 pixels, 2.2 in. transflective LCD, 16-bit color with white LED backlight
  - 4,000 cd/m²
- Top Display:
  - 128 x 32 pixels, 0.19 in. organic light-emitting diode (OLED)
- Keypad:
  - Backlight, 2 soft keys, 3-way navigation key, 4 x 3 keypad, home button
- Buttons/Knobs:
  - Large PTT button, off/on power/volume knob, red emergency button, 15-position top-mounted rotary knob, 3-position concentric switch, 3-programmable side buttons
- Tx/Rx Indicator:
  - Multi-colored LED

Transceiver
- Supported Bands: VHF, UHF, 700/800 MHz
- Channel Capacity: 12,500 (1,250 per mission plan)

ENVIRONMENTAL SPECIFICATIONS

FREQUENCY RANGE (MHz):
- VHF: 136-174 MHz
- UHF: 380-520 MHz
- 700/800: 762-870 MHz

SIGNALING RATE (kbps):
- 9.6

MODULATION:
- Full-Spectrum Multiband
- P25

TRANSMITTER
- Frequency Range (MHz):
  - 136.674 to 174.920
- Channel Spacing (kHz):
  - 25kHz
- Project 25 Reference Sensitivity (dBm):
  - VHF: -121.1
  - UHF: -123.0
  - 700/800: -121.4

ENVIRONMENTAL STANDARDS

TEMPERATURE:
- Operating: 20°C to 45°C
- Storage: -22°C to 70°C

HUMIDITY:
- 95% @ 140°F (+60°C)

VIBRATION:
- MIL-STD-810G, Method 514.6, Procedure I
- VHF: -121.1
- UHF: -123.0
- 700/800: -121.4

ACQUISITION SENSITIVITY:
- -155 dBm (cold start)

INTERMODULATION:
- VHF: 66.2
- UHF: 62.2
- 700/800: 62.0

BATTERIES
- Type Dimensions (L x W x D): 136.674 x 50.0 x 60.0
- Weight: 1.00 kg
- Life: 100 hours
- Capacity (mAh): 3,800

ADVANCED STANDARD FEATURES

- Situational Awareness
- Bluetooth* Cloning
- Multiple Mixed Systems Zones

DIGITAL OPERATION

Protocol: P25
- Type Dimensions (L x W x D): 136.674 x 50.0 x 60.0
- Weight: 1.00 kg
- Life: 100 hours
- Capacity (mAh): 3,800

*Used only with FM certified safe radios.
**GENERAL SPECIFICATIONS**

**Radio Models**
- Full Keypad: TFT LCD w/Digital keypad, Nav cluster, Soft Keys
- Dimensions (Without knobs, antenna, and battery): 5 inches x 3.2 inches x 1.3 inches
- Height: 6.68 inches
- Width: 169.7 millimeters
- Depth: 70.1 millimeters
- Weight (With antenna and battery): 49.9 grams

**TRANSMITTER**

**Typical Performance Specifications**
- Full-Spectrum Multiband*
- Frequency Range (MHz): 136-174 (VHF), 380-520 (UHF), 762-870 (700/800)
- Channel Spacing (kHz): 25 (wideband), 12.5 (narrowband)
- Sensitivity (dB): 12.4 dBm (VHF), 12.0 dBm (UHF)
- Adjacent Channel Rejection (dB): 75 dB
- Spurious and Image Rejection (dB): 77 dB
- Frequency Stability (-30 to +60°C) (ppm): ±0.5
- Modulation Limiting (kHz): 2.5, 4.5 (PM)
- Audio Response (dB): -13 dB
- Spurious and Harmonics (dBc): FM Hum and Noise: <-25 dB, <0 dB
- Audio Distortion (%): <1% on VHF, <1.5% on UHF, <2% on 700/800
- Project 25 Adjacent Channel Power (dB): -67 dB
- Signal to Noise: 25 dB (VHF), 30 dB (UHF), 35 dB (700/800)
- Emission Designators: 16K03E, 11K03E, 8K4F1E, 8K4F1D, 12K03E, 12K03D, 4K03E

**DIGITAL OPERATION**

**Protocol:** P25
- Vocoder Method: AMBE + 2™ Enhanced Full Rate & Enhanced Half Rate
- Modulation Rate (Kbps): 9.6
- Acquisition Sensitivity: -144 dBm (cold start), -155 dBm (hot start)
- Cold Start: <34 seconds
- Hot Start: <1 second
- Mode of Operation: Autonomous GPS
- Safety: RF radiation compliant

**ENVIRONMENTAL STANDARDS**

**Standard Parameter Methods & Procedures/Categories**

- MIL-STD-810G
- MIL-STD-801G
- MIL-STD-810F
- MIL-STD-4685B
- MIL-STD-4685C

**Physical Specifications**
- Front Display: 176 x 200 pixels, 2.2 inch transflective LCD, 16-bit color with white LED backlight
- Top Display: 128 x 32 pixels, 0.91 inch organic light-emitting diode (OLED)
- Keypad: Backlight, 2 soft keys, 5-way navigation key, 4 x 3 keypad, home button
- Buttons/Keys: Large PTT button, on/off power/volume knob, emergency button, 16-position top-mounted rotary knobs, 2-position concentric switch, 3-programmable side buttons

**ENERGY CONSUMPTION**

- Power consumption: 1.8W (VHF), 2.2W (UHF), 4.5W (700/800)
- Battery life: 15 hours (VHF), 12 hours (UHF), 6 hours (700/800)

**RECEIVER**

**Typical Performance Specifications**
- Full-Spectrum Multiband*
- Frequency Range (MHz): 136-174 (VHF), 380-520 (UHF), 762-870 (700/800)
- Channel Spacing (kHz): 25 (wideband), 12.5 (narrowband)
- Sensitivity (dB): 12.4 dBm (VHF), 12.0 dBm (UHF)
- Adjacent Channel Rejection (dB): 75 dB
- Spurious and Image Rejection (dB): 77 dB
- Frequency Stability (-30 to +60°C) (ppm): ±0.5
- Modulation Limiting (kHz): 2.5, 4.5 (PM)
- Audio Response (dB): -13 dB
- Spurious and Harmonics (dBc): FM Hum and Noise: <25 dB, <0 dB
- Audio Distortion (%): <1% on VHF, <1.5% on UHF, <2% on 700/800
- Project 25 Adjacent Channel Power (dB): -67 dB
- Signal to Noise: 25 dB (VHF), 30 dB (UHF), 35 dB (700/800)
- Emission Designators: 16K03E, 11K03E, 8K4F1E, 8K4F1D, 12K03E, 12K03D, 4K03E

**BATTERIES**

- Type Dimensions (L x W x D): 7.7 x 2.36 x 0.88 in.
- Weight: 6.4 oz (181g)
- Life (6% Rx, 5% Rx and 90% standby): 10 hours
- Capacity (mAh): 1200 mAh
- Li-Ion: 4.2 V, 2.36 in.
- Li-Polymer: 3.7 V, 2.36 in.

**ENVIRONMENTAL STANDARDS**

- Standard Parameter Methods & Procedures/Categories
  - MIL-STD-810G
  - MIL-STD-801G
  - MIL-STD-810F
  - MIL-STD-4685B
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- Vocoder Method: AMBE + 2™ Enhanced Full Rate & Enhanced Half Rate
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- Acquisition Sensitivity: -144 dBm (cold start), -155 dBm (hot start)
- Cold Start: <34 seconds
- Hot Start: <1 second
- Mode of Operation: Autonomous GPS
- Safety: RF radiation compliant

**ADVANCED STANDARD FEATURES**

- Situational Awareness: available only in P25 conventional mode, this unique feature provides unit-to-unit tracking using GPS data to aid in personnel accountability.
- Bluetooth* Cloning: with Bluetooth enabled, users can clone mission plans or radio personalities in seconds to aid quick communications.
- Command Tactical Zone (CTZ): allows users to dynamically create custom zones to communicate with other jurisdictions without a need for PC enabled programming.
- Multiple Mixed Systems Zones: allows users to communicate across multiple types of networks whether Analog Conventional, P25 Conventional, P25 Trunked Phase 1 (FDMA) or Phase 2 (TDMA).
ACCESSORIES

The Unity XG-100P offers a full complement of accessories that operate under the extreme conditions experienced by first responders. Several are shown below.

**HEADSETS**
The XG-100P 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 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 XG-100P can be used with Bone Conducting Skull Headsets and Throat Microphone/Headset Kits. Covert audio kits are available in black or beige, and in 2-wire or 3-wire configurations with earpiece, microphone, and PTT.

### Benefits/Facts List
- **Speaker Microphone**
- **Fire Speaker Microphone**
- **Tactical Headset**
- **3-Wire Mini-Lapel Microphone**

Harris offers a versatile line of carrying cases for the XG-100P radio. Options include a standard belt clip and premium belt loop, both of which can be worn with the premium leather shoulder strap.

- **Nylon Carrying Case**
- **Belt Clip**
- **Leather Carrying Case**

Harris offers a variety of chargers for the XG-100P: Single-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**
- **Multi-Bay Charger**
- **Vehicular Charger**

### Additional Accessories Available
Antennas, Bluetooth speaker microphones, Bluetooth covert earpieces, microphones, lithium batteries, PC programming software, and cables are available.

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**FLORIDA | NEW YORK | VIRGINIA | BRAZIL | UNITED KINGDOM | UAE | SINGAPORE**

**HARRIS® TECHNOLOGY TO CONNECT, INFORM AND PROTECT®**

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**UNITY® XG-100P PORTABLE FULL-SPECTRUM MULTIBAND**

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Built-in GPS provides user geographical location effortlessly at no additional cost.
- Designed to scan continuously across all bands, voice modes, and encryption types, the XG-100P provides users exceptional capability and interoperability in a rugged radio.
- Bluetooth® is included as standard for interfacing with wireless audio accessories.

**NEXT GENERATION USER INTERFACE**
The user-centric design of the XG-100P offers significant capability and flexibility beyond push-to-talk.
- Intuitive menu-driven graphical user interface with full-color display
- Large 5-way navigation key and soft keys
- User-defined switch
- Large knobs and configurable top display
- Front-panel programming

**RUGGED FOR FIELD USE**
This rugged portable is engineered to provide reliable and dependable communications in mission critical conditions. The XG-100P meets MIL-STD-810G standards for durability and immersion.

**FUTURE READY**
The XG-100P is a safe investment that agencies can rely on as transitions occur to P25 technology. The radio supports wideband and narrowband channels (per applicable regulatory standards), and its software-defined architecture allows field upgrading to operating modes such as P25 Phase 2 trunking.

**BEST-IN-CLASS AUDIO**
The XG-100P delivers the clear and exceptional audio that users have grown to expect from Harris. Combining a dual microphone design, an active noise-cancellation algorithm, and AMBE+2™ vocoder, this radio provides best-in-class audio in extreme noise and harsh environments. The vocoder also controls distortion that may occur from shouting into the microphone.