MISSION-CRITICAL VOICE & DATA. ROOTED IN SAFETY.

Your radio is your lifeline. APX NEXT® XE is our next step in advancing it. Designed for ruggedness in extreme environments and with our best audio ever. Exaggerated controls now paired with a tough touchscreen that works with or without gloves, in the hottest, wettest, grittiest conditions. SmartConnect keeps you connected even beyond your radio system. The result is a radio that works when you need it, without pause, distraction or doubt.

EFFORTLESS IS ALWAYS IN REACH.

APX NEXT XE is designed for effortless usability when everything is on the line. Oversized intuitive controls are easily distinguished by touch. A mission-critical touchscreen makes it fast and easy to operate your radio. ViQi understands a huge range of voice commands, so you can operate the radio with eyes-up awareness. Every interaction is simple, fast and logical. You stay focused on what matters — your call, your crew and your safety.

BRINGING NEW INTELLIGENCE TO THE POINT OF ENGAGEMENT.

APX NEXT XE application services bring new intelligence to the field — right into your hands. Additions such as ViQi, SmartMessaging, SmartMapping, and SmartLocate rapidly give firefighters vital information, from pin point location details to important multimedia to improve situational awareness. And as part of our unique, end-to-end public safety ecosystem, APX NEXT XE data and operations are secure, and new capabilities can be seamlessly added as your needs evolve.

PROVISION & UPDATE YOUR FLEET IN MINUTES, NOT MONTHS.

APX NEXT XE gives you back time: a cloud-based provisioning system allows you to prepare radios before they arrive. Remote updating keeps radios in the field, with zero touch and zero downtime. MyView Portal provides direct access to subscriptions, warranties and licenses, and a range of services helps you manage your operation. With APX NEXT XE, your ownership experience is streamlined, so your firefighters stay focused and ready.
MISSION-CRITICAL DESIGN

Performance antennas improve comfort and wearability*

Exaggerated hard controls, protected against accidental activation

High Dynamic Range microphones, for outstanding audio capture

Mission-critical touchscreen: rugged, usable with gloves, readable in all lighting conditions

Oversized display sleep/wake and home button

Exaggerated emergency button

Large color top screen displays critical information at a glance

Exaggerated ViQi button

Exaggerated PTT button

UL Division 2 Standard 4400 mAh battery, with 5650 mAh high-capacity option

3 programmable side buttons

Standard housing color in black.

*Radio shown with optional 7/800 stubby antenna.
FEATURES

OPERATION MODES
- Digital Trunking: 9600 Baud APCO P25 Phase 1
- FDMA and Phase 2 TDMA
- Digital Conventional: APCO 25
- Analog Trunking: 3600 Baud SmartNet®, SmartZone®, Omnilink®
- Analog Trunking: MDC 1200
- ASTRO® 25 Integrated Voice and Data
- SmartConnect Multi-net Connectivity*

FREQUENCY BANDS
- All-band: Simultaneous Operation in VHF, UHF Range 1, UHF Range 2, 700 and 800 MHz Bands
- Available in Multi-Band and Single-Band Configurations
- Up to 3000 Channels
- Up to 125 Zones

ADDITIONAL CONNECTIVITY
- Bluetooth (Version 5.0)
- Wi-Fi (802.11b/g/n/ac), 2.4 and 5 GHz Bands
- LTE (FirstNet®, Verizon and Bell Mobility-certified)
- NFC (Near-Field Communications)**

AUDIO FEATURES
- 3 W Speaker with Adaptive Equalization
- 2 Internal HDR Microphones
- Adaptive Dual-sided Operation
- Adaptive Noise Suppression Intensity
- Adaptive Gain Control
- Adaptive Windporting
- IMPRES™ Audio Accessory Compatibility

MANAGEMENT
- RadioCentral™
- SmartProgramming*
- SmartInsight* Preview

LOCATION-TRACKING
- Built-in GNSS (GPS, A-GPS, GLONASS)
- SmartLocate and Indoor Positioning*
- Mission-critical Geofence**
- SmartMapping*

SECURITY
- 256-bit AES*
- Single-key ADP Encryption*
- Software Key
- P25 Authentication*
- Multkey for 128 Keys and Multi-algorithm*
- Over-The-Air Keyloading***
- Over-The-Air Rekeying (OTAR)*

INGRESS PROTECTION
- IP6x Dust
- IPx8 Submersion (2 m, 4 hr)
- MIL-STD Delta-T, 512.X Procedure 1

MESSAGING
- Text Messaging
- Freeform or Canned Messages
- SmartMessaging*

USER INTERFACE
- 3.6” Mission-critical Touchscreen: 800x480 TFT 24-bit Full Color Transflective Display, 1 mm Toughened Glass Lens
- Capacitive Touch Technology: Usable with Gloves
- Up to 4 mm Thick, Resistant to False Actuation from Fresh or Salt Water, Snow, Ice, Dirt or Grease
- High Velocity User Interface: Large Touch Targets, Shallow Menu Hierarchy, Home Screen Information at a Glance, Integrated Applications
- 1.2” Top Display: 200x112 TFT 18-bit Color Transflective Screen, 1 Line of Icons, 2 Lines of Text, 14 Characters per Line, 2 mm Toughened Glass Lens
- PTT Button: 1.50 x 0.67 in (38 x 17 mm)
- Large 16-position Channel Selector
- Large Angled Power/Volume Knob
- Large Orange Emergency Button
- 3 Programmable Side Buttons (1-dot, 2-dot, purple)
- Concentric 2-position Switch
- ABC Zone Switch
- VIQI Button (3-dot)
- Display On/Off/Home Button

VIQI VOICE INTERACTION
- Customizable Voice Announcements
- Voice Control: Radio Operation with Intuitive Commands*
- Virtual Partner Service*

ENERGY
- Standard 4400 mAh UL Div 2 Battery
- Optional High Capacity 5650 mAh UL Div 2 Battery*
- IMPRES 2 Smart Battery Technology

SENSORS
- Ambient Light
- Accelerometer x2 (Display Orientation, Man Down)
- Magnetometer (eCompass)

OTHER FEATURES
- Radio Profiles
- Enhanced Data*
- Multicast Voting Scan*
- Man Down*
- DVRS PSU*
- Digital Tone Signaling*
- APX Personnel Accountability*

DIMENSIONS
- Radio with Standard Battery, no Antenna
  - Height: 5.6in (144 mm)
  - Width: 2.5 in (63 mm)
  - Depth: 2.0 in (51 mm)
  - Weight: 20.1 oz (570 g)
- Radio with High Capacity Battery, no Antenna
  - Height: 7.4 in (187 mm)
  - Width: 2.5 in (63 mm)
  - Depth: 2.0 in (51 mm)
  - Weight: 24.4 oz (692 g)

*Optional Feature  **Hardware-ready  ***Included with OTAR
## PERFORMANCE

### TRANSMITTER

<table>
<thead>
<tr>
<th>Footnote</th>
<th>VHF</th>
<th>UHF Range 1</th>
<th>UHF Range 2</th>
<th>700 MHz</th>
<th>800 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>136-174 MHz</td>
<td>380-470 MHz</td>
<td>450-520 MHz</td>
<td>762-776 MHz, 792-806 MHz</td>
<td>806-825, 851-870 MHz</td>
</tr>
<tr>
<td>Channel Spacing</td>
<td>12.5 / 20 / 25 kHz</td>
<td>12.5 / 20 / 25 kHz</td>
<td>12.5 / 20 / 25 kHz</td>
<td>12.5 / 20 / 25 kHz</td>
<td>12.5 / 20 / 25 kHz</td>
</tr>
<tr>
<td>Maximum Frequency Separation</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
</tr>
<tr>
<td>Rated RF Output Power (Adjustable)</td>
<td>1 W</td>
<td>1.5 W</td>
<td>1.5 W</td>
<td>1.5 W</td>
<td>1.5 W</td>
</tr>
<tr>
<td>Frequency Stability (-30 °C to +60 °C; +25 °C Ref.)</td>
<td>±1.0 ppm</td>
<td>±1.0 ppm</td>
<td>±1.0 ppm</td>
<td>±1.0 ppm</td>
<td>±1.0 ppm</td>
</tr>
<tr>
<td>Modulation Limiting (12.5 / 20 / 25 kHz Channel)</td>
<td>±2.5 / ±4 / ±5 kHz</td>
<td>±2.5 / ±4 / ±5 kHz</td>
<td>±2.5 / ±4 / ±5 kHz</td>
<td>±2.5 / ±4 / ±5 kHz</td>
<td>±2.5 / ±4 / ±5 kHz</td>
</tr>
<tr>
<td>Emissions (Conducted and Radiated)</td>
<td>-75 dBC</td>
<td>-75 dBC</td>
<td>-75 dBC</td>
<td>-75 dBC</td>
<td>-75 dBC</td>
</tr>
<tr>
<td>Audio Response</td>
<td>+1, -3 dB</td>
<td>+1, -3 dB</td>
<td>+1, -3 dB</td>
<td>+1, -3 dB</td>
<td>+1, -3 dB</td>
</tr>
<tr>
<td>Audio Distortion (12.5 / 25 kHz Channel)</td>
<td>0.9% / 0.9%</td>
<td>0.9% / 0.9%</td>
<td>0.9% / 0.9%</td>
<td>0.9% / 0.9%</td>
<td>0.9% / 0.9%</td>
</tr>
</tbody>
</table>

### RECEIVER

<table>
<thead>
<tr>
<th>Footnote</th>
<th>VHF</th>
<th>UHF Range 1</th>
<th>UHF Range 2</th>
<th>700 MHz</th>
<th>800 MHz</th>
</tr>
</thead>
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<td>851-870 MHz</td>
</tr>
<tr>
<td>Channel Spacing</td>
<td>12.5 / 20 / 25 kHz</td>
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<td>12.5 / 20 / 25 kHz</td>
<td>12.5 / 20 / 25 kHz</td>
</tr>
<tr>
<td>Maximum Frequency Separation</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
<td>Full Bandsplit</td>
</tr>
<tr>
<td>Frequency Stability (-30 °C to +60 °C; +25 °C Ref.)</td>
<td>±1.0 ppm</td>
<td>±1.0 ppm</td>
<td>±1.0 ppm</td>
<td>±1.0 ppm</td>
<td>±1.0 ppm</td>
</tr>
<tr>
<td>Analog Sensitivity (12 dB SINAD)</td>
<td>0.178 μV (-122.0 dBm)</td>
<td>0.211 μV (-120.5 dBm)</td>
<td>0.211 μV (-120.5 dBm)</td>
<td>0.224 μV (-120.0 dBm)</td>
<td>0.237 μV (-119.5 dBm)</td>
</tr>
<tr>
<td>Digital Sensitivity (1% BER)</td>
<td>0.266 μV (-118.5 dBm)</td>
<td>0.298 μV (-117.5 dBm)</td>
<td>0.298 μV (-117.5 dBm)</td>
<td>0.335 μV (-116.5 dBm)</td>
<td>0.335 μV (-116.5 dBm)</td>
</tr>
<tr>
<td>Digital Sensitivity (5% BER)</td>
<td>0.158 μV (-123.0 dBm)</td>
<td>0.178 μV (-122.0 dBm)</td>
<td>0.178 μV (-122.0 dBm)</td>
<td>0.224 μV (-120.0 dBm)</td>
<td>0.224 μV (-120.0 dBm)</td>
</tr>
<tr>
<td>Selectivity (12.5 / 25 kHz Channel)</td>
<td>77 / 84 dB</td>
<td>74 / 81 dB</td>
<td>74 / 81 dB</td>
<td>72 / 80 dB</td>
<td>72 / 79 dB</td>
</tr>
<tr>
<td>Intermodulation Rejection</td>
<td>82 dB</td>
<td>80 dB</td>
<td>80 dB</td>
<td>80 dB</td>
<td>80 dB</td>
</tr>
<tr>
<td>Spurious Rejection</td>
<td>98 dB</td>
<td>95 dB</td>
<td>95 dB</td>
<td>98 dB</td>
<td>98 dB</td>
</tr>
<tr>
<td>FM Hum and Noise (12.5 / 25 kHz Channel)</td>
<td>55 / 59 dB</td>
<td>54 / 58 dB</td>
<td>54 / 58 dB</td>
<td>53 / 57 dB</td>
<td>52 / 56 dB</td>
</tr>
<tr>
<td>Audio Distortion</td>
<td>0.90%</td>
<td>0.90%</td>
<td>0.90%</td>
<td>0.90%</td>
<td>0.90%</td>
</tr>
</tbody>
</table>
### IMPRES™ 2 BATTERIES

<table>
<thead>
<tr>
<th>Footnote</th>
<th>Part No</th>
<th>Capacity</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard HazLoc</td>
<td>4 NNTN9217</td>
<td>4400 mAh</td>
<td>Included</td>
</tr>
<tr>
<td>High Capacity HazLoc</td>
<td>4 NNTN9090</td>
<td>5650 mAh</td>
<td>Optional</td>
</tr>
</tbody>
</table>

### WIRELESS

#### LTE
- Bands Supported: 2, 4, 12, 13, 14
- Bands (Hardware Ready): 5, 17
- Device Category: 4
- Certifications: FirstNet®, Verizon®, Bell Mobility

#### WiFi
- Standards Supported: 802.11a/b/g/n/ac
- Frequency Range: 2400-2472, 5180-5825 MHz
- Security: Supports WPA-2, WPA, WEP
- Capacity: Up to 20 SSIDs

#### Bluetooth
- Version: 5.0
- Frequency Range: 2402 - 2480 MHz
- Security: 128-bit AES-CCM Encryption

### AUDIO
- Audio Output Power at Rated: 3 W
- Audio Output Power at Max: 5 W
- Audio Response (EIA): +1, -3 dB
- Speech Loudness at 12 in (300 mm): 105 Phon

#### Audio Features
- Adaptive Equalization
- Adaptive Dual-sided Operation
- Adaptive Noise Suppression Intensity
- Adaptive Gain Control
- Adaptive Windporting
- IMPRES Audio

### LOCATION-TRACKING
- Constellations: GPS, A-GPS, GLONASS
- Tracking Sensitivity: -159 dBm
- Accuracy: <5m (95%) See footnote 5
- Cold Start: <60 Seconds (95%) See footnote 5
- Hot Start: <5 Seconds (95%) See footnote 5
- Mode: Autonomous (Assisted Only)

### COLOR
- Standard Color: Black
- Optional Color: High Impact Green
## ENVIRONMENTAL AND REGULATORY

### MIL-STD

<table>
<thead>
<tr>
<th>Method</th>
<th>Proc./Cat.</th>
<th>Method</th>
<th>Proc./Cat.</th>
<th>Method</th>
<th>Proc./Cat.</th>
<th>Method</th>
<th>Proc./Cat.</th>
<th>Method</th>
<th>Proc./Cat.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Pressure</td>
<td>500.1 I</td>
<td>500.2 II</td>
<td>500.3 I</td>
<td>500.4 I</td>
<td>500.5 II</td>
<td>High Temperature</td>
<td>501.1 I, II</td>
<td>501.2 I/A1, II/A1</td>
<td>501.3 I/A1, II/A1</td>
</tr>
<tr>
<td>Low Temperature</td>
<td>502.1 I</td>
<td>502.2 I/C3, II/C1</td>
<td>502.3 I/C3, II/C1</td>
<td>502.4 I/C3, II/C1</td>
<td>502.5 I/C3, II/C1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature Shock</td>
<td>503.1 I</td>
<td>503.2 I/A1, C3</td>
<td>503.3 I/A1, C3</td>
<td>503.4 I</td>
<td>503.5 I/C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solar Radiation</td>
<td>505.1 I</td>
<td>505.2 I</td>
<td>505.3 I</td>
<td>505.4 I</td>
<td>505.5 I/A1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rain</td>
<td>506.1 I, II</td>
<td>506.2 I, II</td>
<td>506.3 I, II</td>
<td>506.4 I, III</td>
<td>506.5 I, III</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humidity</td>
<td>507.1 II</td>
<td>507.2 II</td>
<td>507.3 II</td>
<td>507.4 I</td>
<td>507.5 II/Aggravated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salt Fog</td>
<td>508.1 I</td>
<td>508.2 II</td>
<td>508.3 I</td>
<td>508.4 I</td>
<td>508.5 I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blowing Dust</td>
<td>509.1 I</td>
<td>509.2 I</td>
<td>509.3 I</td>
<td>509.4 I</td>
<td>509.5 I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blowing Sand</td>
<td>1 Proc</td>
<td>1 Proc</td>
<td>510.2 II</td>
<td>510.3 II</td>
<td>510.4 II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submersion</td>
<td>512.1 I</td>
<td>512.2 I</td>
<td>512.3 I</td>
<td>512.4 I</td>
<td>512.5 I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vibration</td>
<td>514.2 VIII/F, Curve-W</td>
<td>514.3 I/10, II/3</td>
<td>514.4 I/10, II/3</td>
<td>514.5 I/24</td>
<td>514.6 I/24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shock</td>
<td>516.2 I, II, V</td>
<td>516.3 I, V, VI</td>
<td>516.4 I, V, VI</td>
<td>516.5 I, V, VI</td>
<td>516.6 I, V, VI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shock (Drop)</td>
<td>516.2 I</td>
<td>516.3 IV</td>
<td>516.4 IV</td>
<td>516.5 IV</td>
<td>516.6 IV</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ENVIRONMENTAL

- **Operating Temperature** -30 to +60 °C (-22 to +140 °F) See footnote 6
- **Storage Temperature** -40 to +85 °C (-40 to +185 °F) See footnote 6
- **Humidity** Per MIL-STD 810 -
- **ESD** IEC 801 - 2 kV -
- **Dust Resistance** IP6X -
- **Water Resistance (Submersion)** IPX8 (2 meters, 4 hours) MIL-STD Delta-T, 512.X Procedure 1 -

### FOOTNOTES:
1. Please refer to local regulations for available channel bandwidths.
2. Measured conductively in analog mode per TIA / EIA 603 under nominal conditions, and at 1 W Rated Audio for Rx. Selectivity measured using the TIA-603 single-tone method.
4. Listed by UL to non-incendive standards: UL 12102 and CAN/CSA C22.2 No. 213-17 as safe for use in Class I, Division 2, Groups A,B,C,D; Class II, Division 2, Groups F,G; Class III Hazardous Locations.

All specifications are subject to change without notice. For full details consult product service manual, document no. MN005643A01.

### REGULATORY

- **FCC ID** AZ489FT7119
- **IC ID** 109U-89F7119
- **LMR** 8K10F1D, 8K10F1E, 8K10F1W, 8K10F1E, 11K0F3E, 16K0F3E, 20K0F1E
- **Bluetooth** 1M18G1D, 1M1F1D, 2M1F1D
- **WiFi** 12M9G1D, 16M7D1D, 17M9D1D, 36M2D1D, 17M5D1D, 18M4D1D, 16M8D1D, 76M1D1D, 12M8G1D, 16M7D1D, 17M9D1D, 36M2D1D, 17M5D1D, 18M4D1D, 16M8D1D, 76M1D1D, 12M8G1D, 16M7D1D, 17M9D1D, 36M2D1D, 17M5D1D, 18M4D1D, 16M8D1D, 76M1D1D
- **LTE** Band 2 (1850.7 - 1900 MHz), Modulation: *G7D, *D7W
- **All-band Model Number** H55TG9PW8AN
- **Single-band Model Number** H45TG9PW8AN

5. Measured conductively with >6 satellites visible at a nominal -130 dBm signal strength. Specs provided are 95th percentile values.
6. LMR only. Front display, LTE, WiFi, Bluetooth and GPS not available when radio internal temperature is below -20 °C (-4 °F) and -30 °C (-22 °F). Batteries should be charged at 0 to +45 °C (+32 to +113 °F) and stored at +20 to +25 °C (+68 to +77 °F). Reference motorolasolutions.com/batterycare
EXPAND AND CUSTOMIZE YOUR RADIO’S FUNCTIONALITY WITH BEST-IN-CLASS ACCESSORIES.

**AUDIO**
HEAR AND BE HEARD LIKE NEVER BEFORE

XVE500 Remote Speaker Microphone with Channel Control
PMMN4132 - Green
PMMN4132_BLK - Black
- Loudest, clearest speaker
- Four HDR microphones
- Enhanced windporting
- New adaptive noise suppression
- Dedicated ViQi button

**ANTENNAS**
DESIGNED FOR WEARABILITY

7/800 MHz Stubby Antenna 65 mm (760-870 MHz) AN000296A01
Whip All-band Antenna 200 mm (V,U,7/800 MHz) AN000297A01
Colored antenna ID bands are available for easy customization and come in packs of 10.

- 32012144001 Gray
- 32012144002 Yellow
- 32012144003 Green
- 32012144004 Blue
- 32012144005 Purple

**CARRY**
SECURE, EASY ACCESS

Classic Holster
PMLN8208
Boston Leather Carry Case
PMLN8209
Standard Capacity

**ENERGY**
MAXIMIZED POWER, LIFE AND MANAGEMENT

IMPRES 2 Multi-Unit Charger
NNTN9115
IMPRES 2 Single-Unit Charger
NNTN9199
IMPRES 2 Standard Capacity Battery
NNTN9217
4400 mAh UL Div 2 (see footnote 4)
IMPRES 2 High Capacity Battery
NNTN9090
5650 mAh UL Div 2 (see footnote 4)

For a complete list of accessories, please visit motorolasolutions.com/apxnexxtexradio
MANAGED AND SUPPORT SERVICES

ACHIEVE MISSION CRITICAL PERFORMANCE

Essential and Advanced Services provide the tools and expert support needed to efficiently manage your radio fleet. With Premier Services, you transfer your APX NEXT XE two-way radio operations to our managed services professionals who are focused on maximizing performance.

Rely on us to help you achieve your performance targets with the right service level you need for systems, devices and applications. Each package provides a higher level of support, transferring the risk and responsibility to Motorola Solutions.

SERVICES AT - A - GLANCE

- Device Preventive Maintenance
- Accidental Damage
- RadioCentral™ (full-service programming)
- RadioCentral (batch configuration and programming)
- RadioCentral (single radio programming)
- Hardware Repair
- Software Maintenance
- Device and RadioCentral Technical Support
- MyView Portal

Note:
• Accidental damage can be offered as an add-on service with Essential and Advanced packages.
• Device management training can be offered as an add-on service with all three packages.

PROTECT YOUR FOCUS WHEN IT MATTERS MOST

For more information, please visit motorolasolutions.com/apxnextxeradio