IN PUBLIC SAFETY, FOCUS IS YOUR GREATEST RESOURCE. MAKE SURE IT’S PROTECTED WITH APX NEXT®.

A MASSIVE ADVANCE IN MISSION-CRITICAL VOICE AND DATA
Your radio is your lifeline. APX NEXT is our next step in advancing it. It’s designed to military standards for extreme ruggedness. The touchscreen works with or without gloves—in rain, dirt, and dust. Digital mics and high-power speakers deliver our best audio ever, while SmartConnect keeps you connected even beyond your P25 system. The result is a radio that works when you need it, without pause, distraction or doubt.

EFFORTLESS IS ALWAYS IN REACH
APX NEXT is designed for effortless usability when everything is on the line. Intuitive knobs and buttons are easily distinguished by touch. A mission-critical touchscreen makes it fast and easy to operate your radio. ViQi understands a huge range of natural language 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 mission and your safety.

BRING NEW INTELLIGENCE TO THE POINT OF ENGAGEMENT
APX NEXT mission-critical apps bring new intelligence to the field. ViQi enables natural language database queries, rapidly giving vital information, and letting dispatchers stay focused on critical situations. And as part of our unique, end-to-end public safety ecosystem, APX NEXT data and operations are secure, and new capabilities can be seamlessly added as your needs evolve.

UPDATE YOUR FLEET IN MINUTES, NOT MONTHS
APX NEXT gives you back time: a cloud-based provisioning system prepares 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, your ownership experience is streamlined, so your valuable resources stay focused and ready.
MISSION-CRITICAL DESIGN

New antenna technology improves comfort and wearability

Large color top screen, for glanceable status updates

Intuitive hard controls, protected against accidental activation

Digital microphones, for outstanding audio capture

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

Large, distinctive buttons for PTT, emergency and ViQi, and two additional programmable side buttons

Standard 4400 mAh battery, with 5650 mAh high-capacity option
FEATURES

OPERATION MODES
Digital Trunking: 9600 Baud APCO P25 Phase 1 FDMA and Phase 2 TDMA
Digital Conventional: APCO P25
Analog Trunking: 3600 Baud SmartNet®, SmartZone®, Omnilink®
Analog Conventional: 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, and 700 MHz Bands
Available in Multi-band and Single-band Configurations
Up to 3000 Channels
Up to 125 Zones

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

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

AUDIO FEATURES
3 W Speaker with Adaptive Equalization
2 Internal Digital 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 and GLONASS)
SmartLocate and Indoor Positioning* Mission-critical Geofence**
SmartMapping*

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

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

MESSAGING
Text Messaging
Freeform or Canned Messages
SmartMessaging*

VIQI VOICE INTERACTION
Customizable Voice Announcements
Voice Control: 13 Actions with Intuitive Commands*
Virtual Partner Service*

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

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

DIMENSIONS
Radio with Standard Battery, no Antenna
Height: 5.4 in (138 mm)
Width: 2.5 in (63 mm)
Depth: 1.7 in (43 mm)
Weight: 18.5 oz (525 g)
Radio with High Capacity Battery, no Antenna
Height: 7.1 in (180 mm)
Width: 2.5 in (63 mm)
Depth: 1.7 in (43 mm)
Weight: 22.8 oz (647 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>Frequency Range / Bandsplits</td>
<td>-</td>
<td>136-174 MHz</td>
<td>380-470 MHz</td>
<td>450-520 MHz</td>
<td>762-776, 792-806 MHz</td>
</tr>
<tr>
<td>Channel Spacing</td>
<td>1</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>-</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>2</td>
<td>1-6 W</td>
<td>1-5 W</td>
<td>1-5 W</td>
<td>1-2.5 W</td>
</tr>
<tr>
<td>Frequency Stability (-30 °C to +60 °C, +25 °C Ref.)</td>
<td>2</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</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>2</td>
<td>-75 dBC</td>
<td>-75 dBC</td>
<td>-75 dBC</td>
<td>-75 dBC</td>
</tr>
<tr>
<td>Audio Response</td>
<td>2</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>2</td>
<td>0.75% / 0.75%</td>
<td>0.75% / 0.75%</td>
<td>0.75% / 0.75%</td>
<td>0.85% / 0.85%</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>
<tbody>
<tr>
<td>Frequency Range / Bandsplits</td>
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<td>380-470 MHz</td>
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<tr>
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<td>12.5 / 20 / 25 kHz</td>
</tr>
<tr>
<td>Maximum Frequency Separation</td>
<td>-</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>2</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>2</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>
</tr>
<tr>
<td>Digital Sensitivity (1% BER)</td>
<td>3</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>
</tr>
<tr>
<td>Digital Sensitivity (5% BER)</td>
<td>3</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>
</tr>
<tr>
<td>Selectivity (12.5 / 25 kHz Channel)</td>
<td>2</td>
<td>77 / 84 dB</td>
<td>74 / 81 dB</td>
<td>74 / 81 dB</td>
<td>72 / 80 dB</td>
</tr>
<tr>
<td>Intermodulation Rejection</td>
<td>2</td>
<td>82 dB</td>
<td>80 dB</td>
<td>80 dB</td>
<td>80 dB</td>
</tr>
<tr>
<td>Spurious Rejection</td>
<td>2</td>
<td>98 dB</td>
<td>95 dB</td>
<td>95 dB</td>
<td>98 dB</td>
</tr>
<tr>
<td>FM Hum and Noise (12.5 / 25 kHz Channel)</td>
<td>2</td>
<td>55 / 59 dB</td>
<td>54 / 58 dB</td>
<td>54 / 58 dB</td>
<td>53 / 57 dB</td>
</tr>
<tr>
<td>Audio Distortion</td>
<td>2</td>
<td>0.90%</td>
<td>0.90%</td>
<td>0.90%</td>
<td>0.90%</td>
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</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</td>
<td>NNTN9216</td>
<td>4400 mAh</td>
<td>Included</td>
</tr>
<tr>
<td>High Capacity</td>
<td>NNTN9089</td>
<td>5650 mAh</td>
<td>Optional</td>
</tr>
<tr>
<td>Standard HazLoc</td>
<td>NNTN9217</td>
<td>4400 mAh</td>
<td>Optional</td>
</tr>
<tr>
<td>High Capacity HazLoc</td>
<td>NNTN9090</td>
<td>5650 mAh</td>
<td>Optional</td>
</tr>
</tbody>
</table>

ENCRYPTION

- Supported Encryption Algorithms: ADP, AES, DES, DES-XL, DES-OFB, DVP-XL, Localized Algorithm
- Encryption Algorithm Capacity: 8
- Encryption Keys per Radio: 1024 Keys, Programmable for 128 Common Key References (CKR) or 16 Physical Identifiers (PID)
- Encryption Keying: Local Key Loader and Over-the-Air Rekeying (OTAR)
- Synchronization: XL - Counter Addressing OFB - Output Feedback
- Vector Generator: NIST-Approved Random Number Generator
- Encryption Type: Digital and SecureNet, TLS1.2, SRTP
- Key Storage: Tamper-protected Volatile or Non-volatile Memory
- Key Erasure: Keyboard Command and Tamper Detection
- Standards: FIPS 140-2 Level 1 and Level 3, FIPS 197
- Device Certificates: x.509v3 ECC-P384, x.509v3 RSA-2048

CIPHER SUITES

- ECDHE_EDRSA_WITH_AES256_GCM_SHA384
- TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA
- TLS_RSA_WITH_AES_256_GCM_SHA384
- SRTP_AEAD_AES_256_GCM1

COLOR

- Standard Color: Black/Gray
- Optional Side Panel Colors (Supplied as Retro-fit Kits): Red, Blue, Orange, Public Safety Yellow, High Impact Green, Coyote Brown

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


LOCATION-TRACKING

<table>
<thead>
<tr>
<th>Footnote</th>
<th>Constellations - GNSS (GPS and GLONASS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracking Sensitivity</td>
<td>-159 dBm</td>
</tr>
<tr>
<td>Accuracy</td>
<td>5 (&lt;5m (95%))</td>
</tr>
<tr>
<td>Cold Start</td>
<td>5 (&lt;60 Seconds (95%))</td>
</tr>
<tr>
<td>Hot Start</td>
<td>5 (&lt;5 Seconds (95%))</td>
</tr>
<tr>
<td>Mode</td>
<td>Autonomous (Assisted only with LTE service)</td>
</tr>
</tbody>
</table>
ENVIROMENTAL AND REGULATORY

MIL-STD 810

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Method</td>
<td>Proc./Cat.</td>
<td>Method</td>
<td>Proc./Cat.</td>
<td>Method</td>
</tr>
<tr>
<td>Low Pressure</td>
<td>500.1</td>
<td>I</td>
<td>500.2</td>
<td>II</td>
</tr>
<tr>
<td>High Temperature</td>
<td>501.1</td>
<td>I, II</td>
<td>501.2</td>
<td>I/A1, II/A1</td>
</tr>
<tr>
<td>Low Temperature</td>
<td>502.1</td>
<td>I</td>
<td>502.2</td>
<td>I/C3, II/C1</td>
</tr>
<tr>
<td>Temperature Shock</td>
<td>503.1</td>
<td>I</td>
<td>503.2</td>
<td>I/A1, C3</td>
</tr>
<tr>
<td>Solar Radiation</td>
<td>505.1</td>
<td>I</td>
<td>505.2</td>
<td>I</td>
</tr>
<tr>
<td>Rain</td>
<td>506.1</td>
<td>I, II</td>
<td>506.2</td>
<td>I, III</td>
</tr>
<tr>
<td>Humidity</td>
<td>507.1</td>
<td>I</td>
<td>507.2</td>
<td>I</td>
</tr>
<tr>
<td>Salt Fog</td>
<td>509.1</td>
<td>I</td>
<td>509.2</td>
<td>I</td>
</tr>
<tr>
<td>Blowing Dust</td>
<td>510.1</td>
<td>I</td>
<td>510.2</td>
<td>I</td>
</tr>
<tr>
<td>Blowing Sand</td>
<td>1 Proc</td>
<td>1 Proc</td>
<td>510.2</td>
<td>II</td>
</tr>
<tr>
<td>Submersion</td>
<td>512.1</td>
<td>I</td>
<td>512.2</td>
<td>I</td>
</tr>
<tr>
<td>Vibration</td>
<td>514.2</td>
<td>VIII/F, Curve-W</td>
<td>514.3</td>
<td>I/10, II/3</td>
</tr>
<tr>
<td>Shock</td>
<td>516.2</td>
<td>I, III, V</td>
<td>516.3</td>
<td>I, V, VI</td>
</tr>
<tr>
<td>Shock (Drop)</td>
<td>516.2</td>
<td>II</td>
<td>516.3</td>
<td>IV</td>
</tr>
</tbody>
</table>

ENVIRONMENTAL

<table>
<thead>
<tr>
<th>Footnote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
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<tr>
<td>Storage Temperature</td>
</tr>
<tr>
<td>Humidity</td>
</tr>
<tr>
<td>ESD</td>
</tr>
<tr>
<td>Dust Resistance</td>
</tr>
<tr>
<td>Water Resistance (Submersion)</td>
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</tbody>
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REGULATORY

<table>
<thead>
<tr>
<th>FCC ID</th>
<th>A2489FT7119</th>
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</thead>
<tbody>
<tr>
<td>IC ID</td>
<td>109U-99FT7119</td>
</tr>
<tr>
<td>LMR</td>
<td>8K10F1D, 8K10F1E, 8K10F1W, 11K0F3E, 16K0F3E, 20K0F1E</td>
</tr>
<tr>
<td>Bluetooth</td>
<td>1M18G1D, 1M1F1D, 2M1F1D</td>
</tr>
<tr>
<td>WiFi</td>
<td>12M96G1D, 16M7D1D, 17M9D1D, 36M2D1D, 17M5D1D, 18M4D1D, 36M8D1D, 76M1D1D</td>
</tr>
<tr>
<td>LTE</td>
<td>Band 2 (1850.7 - 1900 MHz), Modulation: *G7D, *D7W</td>
</tr>
<tr>
<td></td>
<td>Band 4 (1710.7 - 1745 MHz), Modulation: *G7D, *D7W</td>
</tr>
<tr>
<td></td>
<td>Band 12 (699.7 - 711 MHz), Modulation: *G7D, *D7W</td>
</tr>
<tr>
<td></td>
<td>Band 14 (790.5 - 793 MHz), Modulation: *G7D, *D7W</td>
</tr>
<tr>
<td></td>
<td>All-band Model Number H55TGT9PW8AN</td>
</tr>
<tr>
<td></td>
<td>Single-band Model Number H45TGT9PW8AN</td>
</tr>
</tbody>
</table>

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 12100 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.
5. Measured conductively with >6 satellites visible at a nominal -130 dBm signal strength. Specs provided are 95th percentile values.

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

6. LMR only. Front display, LTE, WiFi, Bluetooth and GPS not available when radio internal temperature is below -20 °C (-4 °F). Hi-capacity battery required for operation between -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 (+88 to +77 °F). Reference motorolasolutions.com/batterycare
ACCESSORIES
EXPAND AND CUSTOMIZE YOUR RADIO’S FUNCTIONALITY WITH BEST-IN-CLASS ACCESSORIES.

AUDIO
HEAR AND BE HEARD LIKE NEVER BEFORE

XV Remote Speaker Microphone
PMMN4123
- Loudest, clearest speaker
- Four digital microphones
- Enhanced windporting
- New adaptive noise suppression
- Dedicated ViQi button

ENERGY
MAXIMIZED POWER, LIFE AND MANAGEMENT

IMPRES 2 Multi-Unit Charger
NNTN9115

IMPRES 2 Single-Unit Charger
NNTN9199

IMPRES 2 Standard Capacity Battery
NNTN9126
4400 mAh
NNTN9127
4400 mAh UL Div 2 (see footnote 4)

IMPRES 2 High Capacity Battery
NNTN9089
5650 mAh
NNTN9090
5650 mAh UL Div 2 (see footnote 4)

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
PMLN7947

Hybrid Leather Carry Case
PMLN7948
Standard Capacity
PMLN7964
High Capacity

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

ACHIEVE MISSION CRITICAL PERFORMANCE
IN PUBLIC SAFETY, FOCUS IS YOUR GREATEST RESOURCE. APX NEXT PROTECTS YOUR FOCUS WHEN IT MATTERS MOST. YOUR MISSION-CRITICAL COMMUNICATIONS DEPEND ON THE CONSISTENT AVAILABILITY OF YOUR RADIOS.

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 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

<table>
<thead>
<tr>
<th>Device Preventive Maintenance</th>
<th>Accidental Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>RadioCentral (full-service programming)</td>
<td>RadioCentral (batch configuration and programming)</td>
</tr>
<tr>
<td>RadioCentral (single radio programming)</td>
<td>Hardware Repair</td>
</tr>
<tr>
<td>Software Maintenance</td>
<td>Device and RadioCentral Technical Support</td>
</tr>
<tr>
<td>MyView Portal</td>
<td></td>
</tr>
</tbody>
</table>

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/apxnext