APX NEXT XE

ALL-BAND P25 SMART RADIO

7/800

En Route
My Status

East Zone
TAC 1

Zone | Contacts | More

Miller, David
Arriving to staging on Kedzie Ave.

New Message | All Messages

Night Mode | Brightness | Settings

11:30

WHEN A CALL LEADS YOU INTO EXTREME ENVIRONMENTS, MAKE SURE YOUR FOCUS IS UNCOMPROMISED.

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.

MOTOROLA SOLUTIONS

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*

Customer Programming Software (CPS)

Radio Management*

LOCATION-TRACKING

Built-in GNSS (GPS, Galileo, GLONASS) and A-GPS

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 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 / Fall Alert*

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)

6.9 in (176 mm)

5.6 in (144 mm)

3.5 in (89 mm)

2.0 in (51 mm)

2.5 in (63 mm)

PERFORMANCE

TRANSMITTER

	Footnote	VHF	UHF Range 1	UHF Range 2	700 MHz	800 MHz
Frequency Range / Bandsplits	-	136-174 MHz	380-470 MHz	450-520 MHz	762-776, 792-806 MHz	806-825, 851-870 MHz
Channel Spacing	1	12.5 / 20 / 25 kHz	12.5 / 20 / 25 kHz	12.5 / 20 / 25 kHz	12.5 / 20 / 25 kHz	12.5 / 20 / 25 kHz
Maximum Frequency Separation	-	Full Bandsplit	Full Bandsplit	Full Bandsplit	Full Bandsplit	Full Bandsplit
Rated RF Output Power (Adjustable)	2	1-6 W	1-5 W	1-5 W	1-2.5 W	1-3 W
Frequency Stability (-30 °C to +60 °C; +25 °C Ref.)	2	±1.0 ppm	±1.0 ppm	±1.0 ppm	±1.0 ppm	±1.0 ppm
Modulation Limiting (12.5 / 20 / 25 kHz Channel)	2	±2.5 / ±4 / ±5 kHz	±2.5 / ±4 / ±5 kHz	±2.5 / ±4 / ±5 kHz	±2.5 / ±4 / ±5 kHz	±2.5 / ±4 / ±5 kHz
Emissions (Conducted and Radiated)	2	-75 dBc	-75 dBc	-75 dBc	-75 dBc	-75 dBc
Audio Response	2	+1, -3 dB	+1, -3 dB	+1, -3 dB	+1, -3 dB	+1, -3 dB
FM Hum and Noise (12.5 / 25 kHz Channel)	2	-53 / -55 dB	-52 / -54 dB	-51 / -54 dB	-50 / -55 dB	-49 / -53 dB
Audio Distortion (12.5 / 25 kHz Channel)	2	0.9% / 0.9%	0.9% / 0.9%	0.9% / 0.9%	0.9% / 0.9%	0.9% / 0.9%

RECEIVER

	Footnote	VHF	UHF Range 1	UHF Range 2	700 MHz	800 MHz
Frequency Range / Bandsplits	-	136-174 MHz	380-470 MHz	450-520 MHz	762-776, 799-806 MHz	851-870 MHz
Channel Spacing	1	12.5 / 20 / 25 kHz	12.5 / 20 / 25 kHz	12.5 / 20 / 25 kHz	12.5 / 20 / 25 kHz	12.5 / 20 / 25 kHz
Maximum Frequency Separation	-	Full Bandsplit	Full Bandsplit	Full Bandsplit	Full Bandsplit	Full Bandsplit
Frequency Stability (-30 °C to +60 °C; +25 °C Ref.)	2	±1.0 ppm	±1.0 ppm	±1.0 ppm	±1.0 ppm	±1.0 ppm
Analog Sensitivity (12 dB SINAD)	2	0.178 µV (-122.0 dBm)	0.211 µV (-120.5 dBm)	0.211 µV (-120.5 dBm)	0.224 µV (-120.0 dBm)	0.237 µV (-119.5 dBm)
Digital Sensitivity (1% BER)	3	0.266 µV (-118.5 dBm)	0.298 µV (-117.5 dBm)	0.298 uV (-117.5 dBm)	0.335 µV (-116.5 dBm)	0.335 µV (-116.5 dBm)
Digital Sensitivity (5% BER)	3	0.158 µV (-123.0 dBm)	0.178 µV (-122.0 dBm)	0.178 µV (-122.0 dBm)	0.224 µV (-120.0 dBm)	0.224 µV (-120.0 dBm)
Selectivity (12.5 / 25 kHz Channel)	2	77 / 84 dB	74 / 81 dB	74 / 81 dB	72 / 80 dB	72 / 79 dB
Intermodulation Rejection	2	82 dB	80 dB	80 dB	80 dB	80 dB
Spurious Rejection	2	98 dB	95 dB	95 dB	98 dB	98 dB
FM Hum and Noise (12.5 / 25 kHz Channel)	2	55 / 59 dB	54 / 58 dB	54 / 58 dB	53 / 57 dB	52 / 56 dB
Audio Distortion	2	0.90%	0.90%	0.90%	0.90%	0.90%

IMPRES™ 2 BATTERIES

	Footnote	Part No	Capacity	Availability
Standard HazLoc	4	NNTN9217	4400 mAh	Included
High Capacity HazLoc	4	NNTN9090	5650 mAh	Optional

ENCRYPTION

Supported Encryption Algorithms	ADP, 256-bit 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 140-3 Level 1 and Level 3, FIPS 197
Device Certificates	x.509v3 ECC-P384, x.509v3 RSA-2048
Cipher Suites FIPS 140-2 Level 1	ECDHE_ECDSA_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

LOCATION-TRACKING

Constellations	GPS, Galileo, GLONASS, A-GPS	-
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)	-

WIRELESS

LTE	Footnote	
Bands Supported	-	2, 4, 12, 13, 14, 17
Bands (Hardware Ready)	-	5
Device Category	-	4
Certifications	7	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

COLOR

Standard Color	Black
Optional Color	High Impact Green

ENVIRONMENTAL AND REGULATORY

MIL-STD

	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F		MIL-STD 810G/H	
	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.5	II
High Temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot	501.5	I/A1, II/A1
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1	502.5	I/C3, II/C1
Temperature Shock	503.1	I	503.2	I/A1, C3	503.3	I/A1, C3	503.4	I	503.5	I/C
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I	505.5	I/A1
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III	506.5	I, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	1 Proc	507.5	II/Aggravated
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	1 Proc	509.5	1 Proc
Blowing Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I
Blowing Sand	1 Proc	1 Proc	510.2	II	510.3	II	510.4	II	510.5	II
Submersion	512.1	I	512.2	I	512.3	I	512.4	I	512.5	I
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24	514.6	I/24
Shock	516.2	I, III, V	516.3	I, V, VI	516.4	I, V, VI	516.5	I, V, VI	516.6	I, V, VI
Shock (Drop)	516.2	II	516.3	IV	516.4	IV	516.5	IV	516.6	IV

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 61000-4-2	-
Dust Resistance	IP6X	-
Water Resistance (Submersion)	IPX8 (2 meters, 4 hours) MIL-STD Delta-T, 512.X Procedure 1	-

REGULATORY

FCC ID	AZ489FT7119
IC ID	109U-89FT7119
LMR	8K10F1D, 8K10F1E, 8K10F1W, 11K0F3E, 16K0F3E, 20K0F1E
Bluetooth	1M18G1D, 1M1F1D, 2M1F1D
WiFi	12M9G1D, 16M7D1D, 17M9D1D, 36M2D1D, 17M5D1D, 18M4D1D, 36M8D1D, 76M1D1D
LTE	Band 2 (1850.7 - 1900 MHz), Modulation: *G7D, *D7W Band 4 (1710.7 - 1745 MHz), Modulation: *G7D, *D7W Band 12 (699.7 - 711 MHz), Modulation: *G7D, *D7W Band 14 (790.5 - 793 MHz), Modulation: *G7D, *D7W Band 17 (704 - 716 MHz), Modulation: *G7D, *D7W
All-band Model Number	H55TGT9PW8AN
Single-band Model Number	H45TGT9PW8AN

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.
3. Measured conductively in digital mode per TIA / EIA IS 102.
4. Listed by UL to non-incendive standards: UL 121201 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.

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 (+68 to +77 °F). Reference motorolasolutions.com/batterycare

7. SIM cards for the listed carriers can be pre-installed at Motorola Solutions factory or supplied by end user via Bring Your Own SIM (BYOS) for certified carriers.

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

ACCESSORIES

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/apxnextxeradio**

MANAGED AND SUPPORT SERVICES

ACHIEVE MISSION CRITICAL 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.

Motorola Solutions provides a range of service capabilities, including:

MYVIEW
A web-based platform that gives you a transparent, single source view of fleet status and service delivery information to help make smarter, faster and more proactive decisions.

TECHNICAL SUPPORT
Industry certified technical engineers can troubleshoot and provide prompt resolution to any technical issues, whether on-site dispatch or remote.

HARDWARE REPAIR AND SOFTWARE MAINTENANCE
Ensure continuous security, performance and enhanced functionality of your two-way radios by getting access to APX NEXT XE certified and tested release software updates and upgrades and protect your radios from normal wear and tear.

ACCIDENTAL DAMAGE
Radios are protected from accidental breakage or liquid spills and physical damage. With state-of-the-art diagnostic equipment all of your agency's radio components are protected in the event of an unexpected failure and are back in operation as soon as possible.

DEVICE PROGRAMMING
APX NEXT XE includes Customer Programming Software (CPS) for one-at-a-time programming. We can enable batch programming for radios with centralized management to dramatically reduce the time and resources needed to provision and update your radio fleet.

As an add-on service, our technical teams can help you provision and program your fleet of radios on-site and train your staff on the radio fleet commissioning and management.

PREVENTIVE MAINTENANCE
Our certified technicians conduct annual maintenance checks to help extend the useful life of your radios, reducing repair and replacement costs.

PROTECT YOUR FOCUS WHEN IT MATTERS MOST

For more information, please visit
motorolasolutions.com/apxnextxeradio

MOTOROLA SOLUTIONS

APX
NEXT XE