APX N line Portable Radio
FAQ

Updated: January 2026

APX standard vs. APX N line

What is the APX N line?	APX N is a new line of next-generation portable radios within the broader APX product family. It includes the APX NEXT series (APX NEXT, APX NEXT XE, APX NEXT XN) all-band radios & APX N70, APX N70 XE, APX N50, APX N30 single-band radios.
Will new software and features continue to be developed for the current APX platform?	Yes, new software upgrades will continue to be released for the APX platform for the foreseeable future.
Will all current APX radio features be supported on APX NEXT series or APX N70?	Some features that are supported on APX radios will not be available on N-line. However, over time, we have expanded on the feature set and will continue to.
Will APX N line interoperate with other APX radios?	Yes, APX NEXT series can operate on the UHF, VHF and 7/800 frequency bands and can interoperate with all other APX radios. All N-line radios are offered in UHF, VHF and 7/800 but APX N70 XE is currently offered in 7/800 frequency bands. N70 XE will see be offered in UHF and VHF in 2026.

Durability

What are the durability specs for APX NEXT?	APX NEXT has the same durability specs as the APX 8000/6000. This is captured in the MIL-STD 810H section of the APX NEXT data sheet.
What are the durability specs for APX N70/APX N70 XE?	APX N70 has the same durability specs as the APX 6000. This is captured in the MIL-STD 810H section of the APX N70 data sheet.
What are the durability specs for the APX N50 & APX N30?	This is captured in the MIL-STD 810H section of their respective APX N50 data sheet and APX N30 data sheet.
What are the water and drop test standards ratings for APX NEXT/ APX N70?	Drop per MIL_STD 810H, 516.6 IV, water submersion IP68 (2 meters, 4 hours).

Accessories

Will previous APX batteries be compatible with APX N line radios?	Batteries will be different across APX and N line. APX NEXT batteries require the IMPRES™ 2 Multi-Unit Charger and the APX NEXT pocket. The APX N70 introduced new chargers that can be shared with APX NEXT. However, batteries are unique to this model. The APX N50 & APX N30 have new chargers that support both models.
Can APX N and previous APX chargers be used interchangeably?	Single Unit Chargers(SUC): ● APX NEXT series, APX N70, APX N70 XE share a compatible SUC. ● APX N50 and APX N30 share a compatible SUC Multi-unit chargers (MUC): ● APX NEXT and APX N70 can use the APX IMPRES™ 2 MUC and the APX NEXT

	and APX N70 with a pocket. ● APX N50 and APX N30 are compatible with the same MUC
What batteries can I use with APX NEXT XN?	Motorola Solutions offers a battery unique to APX NEXT XN in order to meet the stringent specifications of NFPA 1802. A mechanical lock-out feature prevents other APX NEXT batteries from connecting to the radio. 3rd party batteries are not supported as batteries are seen as part of the radio in the NFPA 1802 standard.
Given the additional features supported by APX NEXT/ APX N70, will battery life be equivalent to other APX radios?	We expect users will experience about 14 hours of battery life with the standard 4400 mAh battery, and 18 hours with the hi-cap 5650 mAh battery on APX NEXT. This assumes a typical duty cycle and profile (LMR duty cycle: 5/5/90, touchscreen use: 1 hour, SmartConnect active: 30 mins, LTE Mode: DRX Idle, GPS: Off, Bluetooth: Off, WiFi duty cycle 80/20, NFC: Off, RSM connected.)
What are self-calibration batteries?	Batteries with the self-calibration feature can be identified through a logo, a battery with a charge, on the battery label. These batteries will not require users to go through the traditional hours of IMPRES calibration or recondition process, when charged using the APX NEXT/APX N70 or APX N50/APX N30 compatible IMPRES 2 chargers. A software upgrade is required if used with APX charger NNTN8844, NNTN9115. Refer to the charger user manual to learn how to identify the charger software version and perform charger software upgrade. APX NEXT XN, APX N70 XE, APX N70, APX N50, APX N30 currently offer self calibration batteries.
Does Battery Fleet Management (BFM) support APX N batteries?	Yes, BFM provides users with an intuitive software tool to manage their entire fleet of APX batteries allowing them to optimize fleet performance, efficiently manage tracking & replacement of IMPRES/2 batteries, and determine type and quantity of batteries to reorder.
Do APX N line radios support an intrinsically safe rating from FM or UL?	APX NEXT is certified to UL Div 2 with the appropriate batteries. UL Div 2 batteries are available as an orderable option for APX NEXT and ship as the standard battery for APX NEXT XE* (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 Division 2 Hazardous (Classified) Locations.) *See APX NEXT XE section of FAQ for additional details about APX NEXT XE and standard batteries. APX N70, APX N70XE, APX N50, APX N30 are certified UL Div 1 with the appropriate orderable battery option.
Can wired audio accessories be used interchangeably on APX N and other APX radios?	APX NEXT series and APX standard radios have a GCAI audio connector. The APX N70, APX N50, and APX N30 have a separate suite of GCAI mini compatible audio accessories. An adaptor is available for those accessories without a GCAI mini

	equivalent. Please find the accessories offered in the [accessory catalog]().
Can bluetooth accessories be used interchangeably on APX N line and other APX radios?	APX N line radios are not compatible with APX Mission Critical Wireless Bluetooth accessories or "blue dot" MPP pairing. Commercial off the shelf (COTS) bluetooth accessories will work/are compatible. We now offer the WM800, which is compatible with N-Line and standard APX models. Additionally, we now offer SVX VRSM for APX NEXT and APX N70.
What audio accessories are compatible with APX NEXT XN?	When in hazard zone mode, RSMs or other audio accessories must meet the requirements of NFPA 1802. There will be an alert on the radio if the accessory is not approved for hazard zone mode. The XVN500 RSM is certified for use in hazard zone mode and NFPA 1802 certified when used with APX NEXT XN. When outside of hazard zone mode, compatible RSMs or devices that serve the function of an RSM, that do not meet the requirements of NFPA 1802, can be configured with APX NEXT XN as long as they can be quickly and easily deconfigured by the user prior to entering the hazard zone. For example, a boom mic headset or earpiece.
Why did the audio connector change between the previous APX and APX N70, APX N50, APX N30?	The APX N70, APX N50 and APX N30 picked up the accessory connector to make the model form factor as efficient as possible and to leverage a growing fleet of GCAI mini accessories.
Can the XVE 500 or XE 500 RSM be used with APX NEXT XN?	Yes, as long as the APX NEXT XN is not set to Hazard Zone Mode channel/zone. Only XVN 500 is certified to be used in Hazard Zone Mode.
What remote speaker microphone can be used with APX N70XE?	APX N70XE is paired with the XVE500m, a new fire microphone with a mini-GCAI connector.
What carry accessories can I use with APX NEXT XN?	A carry solution is not required to be compliant with NFPA 1802. For example, the radio can be worn in a turnout coat pocket. Motorola Solutions offers an optional carry solution that is compatible with APX NEXT XN and approved for use in hazardous/emergency response environments. Aftermarket / 3rd party carry accessories can be used, but should not interfere with the fit, form or function of the device. Also, the carry solution should be made from materials suitable for use in hazardous/emergency response environments as they may impact the performance or void the radio's warranty.
Can antennas be used interchangeably on APX N and other APX radios?	No,for the best coverage performance, only pair APX N line antennas with the proper radio and vice versa.

Programming

| How are APX N line radios | All APX N radios are compatible with CPS cable programming or Radio Management |

programmed/provisioned?	(RM) and RadioCentral (RC).
	RadioCentral can use LTE or pre-provisioned WiFi, radios are programmed and updated over-the-air, using the RadioCentral provisioning tool. Codeplug and firmware updates get downloaded in the background using LTE or WiFi. Once the download is complete, users receive a notification prompt asking them to install the update now or later.
	Programming and provisioning over WiFi comes standard with each APX NEXT series or APX N70 radio and requires purchasing the programming tool Radio Management or RadioCentral. On top of this, to utilize these functions over LTE, SmartProgramming is required.
Can I load encryption keys over the air?	Customers using encryption keys can load them by physically connecting the radio to the KVL.
	With APX NEXT series or APX N70, keys can be loaded over the air with Touchless Key Provisioning (TKP) & RadioCentral as long as a KMF is present and the radio is also enabled with OTAR (Over the Air Rekeying). Unlike programming and software updates that are done over WiFi or LTE, over-the-air key loading happens over LMR.
How long does it take to program a radio or upgrade the firmware on RadioCentral?	Programming a radio can take as quick as 1 minute to 15 minutes, depending on the programming tool. With RM or RC, a technician can plan all the updates in advance and automatically send them to radios as they become available. A small codeplug change is much faster than a larger firmware update. Once the new update is pushed through cable, WiFi, or LTE, the user has to accept the change on the radio.
What considerations should a customer have for an APX mixed fleet?	Customers can manage their mixed fleet in different ways. ● Using CPS one to one programming ● Using RM or RC for fleet management and pushing batched programming jobs for Standard APX, N line and Mobiles.
What changes are there from how users program and provision other APX radios compared to APX NEXT series or APX N70 on RadioCentral?	All APX radios can be programmed with CPS (tethered) or RM (tethered, WiFi, OTAP) or RadioCentral (WiFi, LTE). Initial provisioning is enhanced with RC: - The configurations are planned in advance - The radio will automatically download it from RC upon unboxing (thanks to factory pre-provisioning the radio in RC)
How do customers pre-provision a radio to coordinate automatic out-of-the-box programming?	Using the RadioCentral software, users are able to pre-provision their radios prior to receiving them, based on serial number. The radios will appear in the user's RadioCentral instance when they ship from the factory.
What is Role Based Access?	RadioCentral Role Based Access is a new optional feature that introduces Admin, Technician, and Reader roles assignable to users. The role assignment allows access control to individuals managing the Device configuration in an agency.
What is Self Serve Agency Management?	A RadioCentral feature designed to enhance radio partitioning for large customers and enable merging of multiple agencies into a single fleet. This feature allows for self-service rehoming of radios across agencies and folders, and enables independent agencies to build trusted relationships for resource sharing.

Device Managed Services (DMS)

What services are available for APX N line radios?	Essential services are designed for customers who want to limit their investment to basic hardware and software support. Features include: • Standard Hardware Repair • Access to CustomerHub with device service information • Technical Support Optional DMS Add-Ons include: • Device Management Training - hands-on training workshop for radio technicians • Accidental Damage • Tailored services for preventive maintenance or on-demand codeplug and firmware updating Programming Solutions (CPS,RM, RC) are still offered but are not part of a specific DMS package.
Can a customer see the status of their DMS subscription?	Yes - customers can see the status and future expiration date of DMS subscriptions for all devices in their fleet through the CustomerHub.
What is included with the Device Management Training optional service?	Device Management training includes access to an online overview course as well as a 2-day instructor workshop designed for radio technicians. It covers how to use the programming tool, as well as CustomerHub Portal capabilities.

Application Services

What are application services?	APX mission-critical applications bring new intelligence to the field. Application services are subscription-based services that leverage the radio's broadband capabilities. APX NEXT series and APX N70 offer SmartProgramming, SmartConnect, SmartLocate, SmartMapping, SmartIncident, and SmartMessaging, SmartVideo. APX N50 and APX N30 offer SmartConnect.
Can APX N line radios run apps from the app store?	No, the devices do not have access to the general app store.

SmartConnect

What is SmartConnect?	SmartConnect on APX N line radios maintains your voice communications when outside of LMR coverage by automatically switching between the P25 LMR and the LTE cellular network or WiFi network within seconds. Authentication, status, talkgroups and encryption are all preserved - without interruptions or resets. APX NEXT series and APX N70 series offer this feature over LTE or WiFi. The feature is also available on APX N50, APX N30 and other APX models; however, the APX portables operate SmartConnect via pre-provisioned WiFi.
What radio features are not available when using SmartConnect?	At this time, GPS/location on PTT/LMR, group alias, private call, and site trunking are not available when using SmartConnect.

What determines when APX radios switch to a broadband connection?	APX radios are constantly monitoring the quality of the LMR connection. If the LMR coverage drops below a designated threshold, which is pre-configured in the radio, the radio will automatically switch to broadband. When the LMR signal becomes acceptable again, the radio automatically switches back to LMR.
How is SmartConnect different from other broadband push-to-talk offerings like WAVE and Critical Connect?	SmartConnect offers interoperability between LMR and LTE/WiFi networks similar to our other broadband push-to-talk solutions, there are key differentiators between the solutions: 1. SmartConnect on APX automatically switches push-to-talk functionality between LMR and Broadband (LTE or WiFi) when LMR coverage falls below a certain threshold, allowing the user to stay focused on the mission. 2. SmartConnect is a true extension of your ASTRO P25 system, not just a simple patch between VoIP and P25. This solution creates an ASTRO system overlay/zone where the P25 voice and data travels via broadband instead of the traditional LMR frequencies, resulting in broadband operation that sounds like P25 and retains most P25 system features.
What cloud environment is SmartConnect supported in?	SmartConnect is supported in US GOV, CCCS, and FedRAMP/GovRAMP.

SmartLocate

What is SmartLocate?	SmartLocate sends APX NEXT and APX N70 GPS coordinates via LTE or WiFi to CommandCentral Aware and/or P1 CAD, bypassing the P25 radio system .Using broadband to enable location allows more frequent and customizable measurements, up to once every three seconds if necessary.
What system dependencies are there in order for SmartLocate to operate?	SmartLocate does not have any system dependencies and can be used on any ASTRO 25 system, including Analog, Digital, Trunking, or Conventional. However, Dynamic Mode does require IMW and cloud connector on the P25 system.
What is SmartLocate Dynamic Mode?	SmartLocate Dynamic mode is a SmartLocate feature standard with the APX NEXT software release (June 2020) that dynamically switches between P25 and LTE to send location updates, where previously, the user would have to choose one or the other. With Dynamic mode, if SmartLocate is active, the radio will "prefer" LTE, but it will drop back to P25 if the LTE signal fades. This adds another level of reliability for location-tracking.
Can APX NEXT/APX N70 series utilize location over LMR rather than SmartLocate?	Yes. If the user wants to report location data over LMR to an on-prem CAD system, they require IMW. If they want to report location data over LMR to CommandCentral Aware and/or SmartMapping they require IMW and cloud connecter.
How can users see each other on APX NEXT?	Radio location from SmartLocate is visible on other APX NEXT and APX N70 series radios with the SmartMapping application. Radio location from SmartLocate can also be displayed on a map view within the command center but will require CommandCentral Aware. Aware also has the capability to integrate with multiple existing 3rd party CADs. Contact your Motorola Solutions Sales Representative for more details.
Is there an accuracy difference in location over LMR and SmartLocate?	The accuracy of the GPS (feet displacement) is the same between LMR and LTE GPS. However, SmartLocate increases the available location reporting cadence and increases the coverage area within which you can track GPS, as it is no longer limited to radio system coverage.
What is SmartLocate Indoor	Indoor Positioning is an enhancement for SmartLocate available with the 2020.1 release

Positioning?	(May 2020) of APX NEXT and at the time of shipment with APX N70. With this enhancement, APX NEXT series and APX N70 series triangulate its location, using nearby cell-tower and WiFi access points to enhance accuracy. The radios do not need to be connected to the WiFi access points, but rather, will automatically recognize that there are access points present. Radios can now be tracked more accurately when they are indoors. Location performance is also improved in marginal conditions, such as deep street canyons or dense forests.
Is Indoor Positioning an additional cost for SmartLocate?	No. There is no extra charge for Indoor Positioning. It is included with SmartLocate, as well as SmartMapping.
What environments is SmartLocate supported in?	SmartLocate is supported in US GOV, CCCS and FedRAMP/GovRAMP.

SmartMapping

What is SmartMapping?	SmartMapping is an intuitive mapping tool built right into the APX NEXT and APX N70 series, allowing you to view your precise location and track nearby officers on a modern mapping interface integrated right into your radio. You can also search for an address or colleague, drop waypoints, quickly pinpoint officers in distress, and initiate voice calls and alerts, all right through the SmartMapping application.
How can I pinpoint an officer in distress using SmartMapping?	When an officer presses the emergency button on his/her radio, their icon, which is displayed on the SmartMapping map, will visibly change to indicate their emergency button has been pressed. Others viewing the SmartMapping map will be able to quickly identify any emergency icons at a glance from the mapview.
Can SmartMapping operate over WiFi?	Yes, SmartMapping can operate using both WiFi and LTE.
With SmartMapping, how detailed is the information I can access about my current location?	From the APX NEXT and APX N70 series home screen, the SmartMapping widget will display the approximate street address (or closest intersection) associated with the device's GPS location. Upon clicking into the mapview, users will see their location displayed on a map, with the ability to click through to view further details including street address and GPS coordinates.
Are there ways to locate an officer or point of interest other than navigating the mapview?	Yes. SmartMapping allows users to search an individual by name or predefined identifier. A user may also search a specific address. Simply navigate to the search box within the SmartMapping toolbar, enter search information and SmartMapping will pinpoint the person or place on the map interface. You can also view all nearby officers within a list view menu or search historical waypoints and addresses.
Can SmartMapping provide navigation instructions?	SmartMapping cannot provide specific navigation instructions at this time, but will however display the bearing/direction and distance of a selected officer or point of interest.
Are there other required products or infrastructure dependencies in order for SmartMapping to operate?	There are no infrastructure dependencies for SmartMapping to operate, although tracked APX radios require SmartLocate or IMW and Cloud Connector (tracked APX NEXT series/APX N70 radios require SmartLocate; tracked APX radios require IMW and cloud connector)
How does SmartMapping relate to SmartLocate and CommandCentral Aware?	SmartMapping is the application and mobile map interface for APX NEXT series and APX N70 series that will display the user's current location, as well as the location of other tracked radios directly on the screen. SmartLocate, a separate application for APX

	NEXT/APX N70 series, is the location routing service that collects and shares location information and updates over LTE and WiFi to other radios/devices as well as to the command center. CommandCentral Aware is the command center software with a browser-based mapping screen where command center staff can monitor the location and status of officers in the field.
Can you communicate with other radios through SmartMapping?	Yes. You can initiate a private call or call alert with the radios displayed on the map, provided the radios support receiving private calls or call alerts over the P25 LMR network. This can be done by tapping on the officer's location pop-up from the mapview and navigating to the contact details page. From here, simply tap the 'call' icon to initiate a private call, or the 'page' icon to send a call alert. In the future, SmartMapping will support other forms of communication from the map view.
Can SmartMapping show the location of devices other than APX NEXT or APX N70?	At this time, SmartMapping can show the location of other APX radios, provided IMW is set up with a cloud connector. Talk with your sales representative for more information.
What map layers are available on SmartMapping?	With SmartMapping, you can switch between "base layers" of street map, terrain map, or satellite imagery.
What environments is SmartMapping supported in?	SmartMapping is supported in US GOV.

SmartMessaging

What is SmartMessaging?	SmartMessaging is an application built directly into the APX NEXT series and APX N70 series home screen that allows you to share multimedia messages across your extended team via LTE. Share text messages, picture messages, voice notes and videos with individuals or groups directly from your radio.
Can SmartMessaging operate over WiFi?	Yes, SmartMessaging can operate using both WiFi and LTE.
Are there other required products or infrastructure dependencies in order for SmartMessaging to operate?	There are no infrastructure dependencies for SmartMessaging over LTE between APX NEXT series/APX N70 radio. SmartMessaging today can be administered through CommandCentral Aware. (Q1 2026)
What kinds of multimedia can be sent using SmartMessaging?	As of June 2020, SmartMessaging will allow users to send and receive text messages, image messages, videos and voice notes although the APX NEXT series and APX N70 series will not be capable of taking photos or recording video or audio directly from the device at this time. These forms of multimedia may be received and forwarded.
Can I start message groups or share messages to more than one individual with SmartMessaging?	Yes, SmartMessaging allows the exchange of messages between both individuals and groups. Groups must be predefined by the system's administrator.
Can you use SmartMessaging to communicate to smartphones and other smart devices?	Yes. APX NEXT series/APX N70 will be able to exchange multimedia messages with CC Responder or pull it up on a web browser via CommandCentral Aware.

Can you communicate over SmartMessaging to other APX radio models?	APX NEXT series/APX N70 can exchange messages with other APX radios models in a future release of SmartMessaging.
Can messages be logged or securely archived for future reference?	Currently, SmartMessaging server sync has the ability to delete messages after being stored for 30 days. This was introduced in the ASTRO 2022.1 SW Release. Do note that SmartMessaging will not be static, and there is full intention to deliver updates and expand capabilities, such as the integrations with our secure digital evidence management platform.
What is new with SmartMessaging 2.0?	1. Support for keyboard in messaging on the APX N70 2. Continuous Inbox when using CommandCentral login 3. Support for 1-1, Group Messages (up to 50), Named Channels (5,000 max) and Broadcast Channels (20,000 max) 4. Search Conversations by unit, name, and message details 5. Integration with SmartIncident CAD Comments and Messaging Incident Channels 6. Attachments can be up to 250MB 7. Access from your smartphone browser to share multimedia
What environments is SmartMessaging supported in?	SmartMessaging is supported in US GOV.

SmartIncident

What is SmartIncident	SmartIncident is a CAD client Application Service running on APX NEXT and N70 devices, that integrates with PremierOne CAD. Fully integrate with the existing portfolio of APX NEXT/N70 series Application Services and Command Central.
What capability does SmartIncident provide?	Unit Management: On-device self-assignment to a Unit ID, On-device Unit status updates, view other units' status. Incident Management: ● View assigned incidents- Includes active and stacked incidents, Receive dispatches ● View Key Incident information - Notifications, Other assigned units, CAD comments, Premise/Hazards, Multimedia attachments Mapping Capabilities: View personnel and devices on the map. display my current incident on the map. Display current and stacked incidents in the List view. View other units' emergency status on the device, CC Aware and the CAD system.
What environment is SmartIncident supported in?	SmartIncident is currently only supported in US GOV.
Does SmartIncident have any codeplug dependencies?	SmartIncident per se, does not have any codeplug dependencies. SmartIncident interacts with on-prem CAD. As a result the application can access data considered CJIS sensitive. Motorola provides a solution to protect the data. A separate feature, Session Lock, allows the customer to enable on a per application feature basis, e.g. Smartmapping. The user can enable this feature to implement session timer expiration requiring the user to login. The agency has the option to select duration for inactivity.
Does SmartIncident support 3rd party CADs?	Not at the moment, but something we expect in the future.

SmartVideo	
What is SmartVideo?	SmartVideo application and SVX video RSM, you can live stream to CommandCentral Aware and offload video to CommandCentral DEMS - all via your APX NEXT or APX N70 radio's LTE.
What is needed for SmartVideo?	APX NEXT or APX N70 with SmartLocate for location activation, as well as an SVX.
Are there backend software systems I need for SmartVideo?	Yes, CommandCentral DEMs for video evidence data, and CommandCentral Aware for livestreaming.

ViQi	
What is ViQi?	ViQi enables users to interface with their APX N line radios using their voice. There are a series of voice commands that can be leveraged each with multiple wording variations, from changing zone, channel and volume, to getting battery status. This lets you use your radio with your eyes up.
What is Assist?	Assist is a new, consolidated brand for our interactive AI experiences across the Motorola Solutions portfolio. Any time a customer interacts with an AI-enabled feature that helps them be more efficient, more effective or safer - that's an Assist experience. ViQi is a great representation of Assist.
Can you use voice control from an accessory?	The XVP/XVE/XVN RSMs, WM800 and SVX are the only accessories with which ViQi is accessible using the dedicated ViQi button on the front grill.
What can you control on the radio using voice control?	Actions available on APX NEXT series & APX N70 series using intuitive voice commands: - Zone/Channel change and query - Channel change and query - Zone change and query - Volume control and query - Radio profile changes - Battery query - Home (go to home zone and channel) - Scan on/off - Cancel - Time -Command help -Video tagging Actions available on APX N50 & APX N30 using specific voice commands: -Channel change and query -Zone change and query -Battery query -Volume change -Scan on/off -Preset change -Profile change -Command help Please find the full command list here.

What happens if you are using ViQi when a radio transmission is received?	If ViQ is programmed to high priority mode, and the button has been pressed and held to initiate ViQi, the ViQi operation continues to execute and the received audio will be muted. The ViQi confirmation feedback audio is mixed with any incoming radio transmission. If ViQi is set to low priority mode and the radio transmission is received upon pressing and holding the button, ViQi will not be initiated.

Smart touch interface & display

How many characters can the larger top display show at once?	14 characters
Can users wear gloves when operating the touchscreen?	Yes. The SmartTouch display allows users to use the touch screen interface while wearing a wide assortment of gloves, including medical gloves and protective work gloves (up to 3mm thick). Additionally, the touch screen is operational in wet conditions without risk of false actuation.
Can you turn off the bright touch screen?	Covert mode is available to fully turn off the screen as well as to dim the larger screen. Night Mode provides the option to display a less-bright color scheme on the screen.
If the touch display is rendered unusable, can you still access and control mission-critical radio features?	Yes. Due to segregated operating systems - one for radio and one for applications - any breakage or malfunction of the touch screen or apps processor does not inhibit the usage of the mission critical radio features and functionalities controlled using the hardware knobs and buttons.
Which APX N line radios have a keyboard within the touchscreen?	APX NEXT series and APX N70 series offer a keyboard.

Audio

How many internal mics does the new XVP/XVE500/XVN500 RSM, WM800, and SVX have vs. the previous APX RSMs?	The new RSMs have four high dynamic range mics and the adaptive audio noise reduction technology to provide the clearest transmission in high noise. The APX XP RSM and Windported RSMs have two mics or less.
What are the differences between XVP / XVE500/XVN500 RSM, WM800 and SVX and the previous APX RSMs?	The new RSMs include the following: • A larger, more clear speaker • Four digital microphones • Enhanced windporting design • Better ergonomics reducing muffled audio • New adaptive noise suppression • Dedicated ViQi button
What is automatic gain control?	Automatic gain control is technology that normalizes the audio levels in a radio. This means low audio levels can be automatically increased and vice versa, high audio levels can be automatically lowered. Automatic gain control directly addresses the common public safety user complaint of "constantly adjusting their radio volume throughout their shift". This new technology will significantly reduce the number of necessary radio volume adjustments, creating a better user experience.
What wireless RSMs do we have to offer with the high dynamic audio capability?	WM800 and SVX. Please view the latest accessories catalog for more information.

What is Intelligent Noise Reduction?	Intelligent Noise Reduction (INR) is an advanced software algorithm embedded in radios that removes background noise. It distinguishes a transmitting voice from various non-stationary sounds like sirens and heavy machinery. There are three configurable INR levels, allowing users to balance noise suppression with contextual awareness. INR does not connect or interact with the cloud.
How does Intelligent Noise Reduction compare to Adaptive Audio Engine?	Intelligent Noise Reduction is machine-taught noise-cancelling technology that is constantly evolving. You can expect Intelligent Noise Reduction to improve audio quality with every firmware release. Adaptive Audio Engine enables the radios to have the physical hardware in place for noise cancelling.

LTE/Broadband

What LTE carriers are available to use for the offered Application Services?	APX NEXT series and APX N70 series are certified for use on the AT&T/FirstNet and Verizon networks in the US and the Bell Mobility network in Canada. T-Mobile was certified on models of APX NEXT shipping after January 2026. Motorola Application Services are complete solutions that include LTE data service, so customers do not need to acquire a broadband data subscription independently.
Will customers need to purchase a subscription from the cellular carriers to enable LTE ?	LTE is included in all application service subscriptions (SmartConnect, SmartProgramming, SmartLocate, SmartMapping, SmartMessaging, SmartIncident,SmartVideo) when SIM cards are pre-installed at the Motorola Solutions factory.
Can customers provide their own SIMs to use in this device?	As of October 2022, customers can choose to purchase APX NEXT & APX N70 radios without Motorola managed LTE service otherwise known as BYOS (Bring Your Own SIM). However, these radios are only certified for the AT&T FirstNet (USA), Verizon (USA), and Bell Mobility (Canada) wireless carriers. Customers who use any other wireless carrier will not receive any Motorola customer support to resolve any LTE issues. Although BYOS customers will receive a 33% price discount on app service subscriptions (up to 3 services), customers will have to take on many more responsibilities in managing their own LTE service. Please reach out to your account manager to get the full list of responsibilities that Motorola would normally manage for you.
Can customers have two SIM cards in an APX NEXT series or APX N70 radio for use on two different LTE networks?	No, APX NEXT series and APX N70 have a single removable SIM slot.
Can customers remove the SIM card for the APX NEXT series or APX N70 and use it in another LTE device?	The SIM is locked to the device from which it ships from Motorola Solutions. Although the SIM is accessible and can be physically removed, it will not work in any other device but the one that it was locked to, when the radio was built by Motorola Solutions.
How do customers change the LTE chipset if necessary during the product's lifetime?	The APX NEXT series and APX N70 series have the latest embedded LTE chipset that's augmented with a powerful applications processor and undergone rigorous system and interference testing to ensure optimal performance and ruggedness. As the dynamic evolution of the commercial carriers chipsets continues, Motorola expert technicians can help manage the chipset replacement process while guaranteeing that the replacement process does not compromise the devices' performance or durability.

	Devices with field-swappable chipsets are prone to the integrity of the housing being compromised allowing the radio to become susceptible to the introduction of dust, water, etc. into the device leading to a limited life cycle. Field-swappable chipsets are not as rugged in design in order to accommodate ease of installation and still require the installer to have the appropriate certifications and equipment on site to perform the replacement procedure in order to maintain IP68 protection, intrinsically safe approvals, and to ensure the radio is not damaged in the process. Motorola Solutions technicians can guarantee that performance and device integrity is maintained through the chipset replacement process.
APX NEXT & APX N70	
What frequency bands and frequency band configurations can APX NEXT/N70 radios be ordered in?	APX NEXT is available for operation on UHF, VHF, and 7/800 MHz frequency bands. Customers can order APX NEXT out of the factory in single, dual, or all-band configuration. APX N70 is available in 7/800, UHF, and VHF. APX N50 and APX N30 are available in all bands 7/800, VHF and UHF.
What antenna comes with APX NEXT?	APX NEXT ships standard with an all-band whip antenna, supporting operation on 7/800, VHF, and UHF frequencies. A single-band 700/800MHz stubby antenna can also be selected for any configuration that includes 700/800MHz. In 2021, additional single-band only antennas will be made available, to support operation on just one of the above frequency bands.
How long does it take for APX NEXT to turn on?	APX NEXT functions on a segregated processor - one for radio and one for applications. No matter what, the radio processor turns on and is functionable in under 4 seconds. Users have the option to keep their radio in cold or warm start mode. In cold start mode, the apps processor takes about 25 seconds and from warm start mode, the apps processor takes about 5 seconds to power on. Regardless of whether the apps processor is in the process of turning on or has become unresponsive, the radio functionality is never compromised.
What happens if the app processor malfunctions, is radio functionality compromised?	APX NEXT functions on a segregated processor meaning that the radio and apps functionality are separate and independent. If the app's processor goes down, radio functionality is maintained.
Do APX NEXT radios support Fall Alert?	Yes. Fall Alert is available as an additional standalone option.
Does APX NEXT support Personnel Accountability?	APX Personnel Accountability will be supported on APX N radios, giving users the ability to press the PTT button or other button to acknowledge roll calls, PAR checks and evacuation notifications sent by Incident command via MDT/laptop running APX Personnel Accountability Application. Note, that as with other APX radios, the APX N radios will only be able to receive and acknowledge the above notifications at this time. An MDT/laptop/tablet with LTE connection will be needed to initiate them.
Is DVRS PSU functionality supported on APX NEXT and APX N70?	Yes. DVRS PSU functionality is supported on APX NEXT and APX N70 as an added option which may be selected during ordering.

Is APX NEXT shipping in Canada?	As of May 2020, APX NEXT is available in Canada as well as the US. APX NEXT is certified to operate on the Bell Mobility LTE network. Additionally, we offer APX NEXTi internationally.
What special considerations are there for APX NEXT in Canada?	APX NEXT in Canada has embedded Bell LTE data service. SmartProgramming, SmartConnect, SmartMapping, SmartMessaging, and SmartLocate are currently the available application services, which are hosted in the CCCS.
Will the APX N50 and APX N30 offer more than a limited keypad?	Our customer research indicates users are not often typing text, rather using the keypad for shortcuts. At this time we are only offering model 2.

APX NEXT XE

What is APX NEXT XE, and What does 'XE' indicate?	'XE' is indicative of the Extreme Series of APX radios, designed with exaggerated ergonomics and extreme features for operation in more rigorous environments. Similarly, APX NEXT XE is the Extreme Series to the APX NEXT platform, bringing XE features to the advanced APX NEXT P25 Smart Radio.
Who is the ideal customer for APX NEXT XE?	APX NEXT XE is an ideal solution for fire/EMS, or other public safety customers interested in the advanced features and capabilities of APX NEXT but prefer XE ergonomics for use in more extreme environments.
What enhancements and differences are included with APX NEXT XE that are not included on standard APX NEXT?	APX NEXT XE includes an exaggerated t-grip shape, enlarged buttons and controls, higher-torque knobs, and XE crash bar for added screen protection and easier use with gloves and in harsh environments. Additionally, APX NEXT XE ships standard with a hazloc certified UL Div 2 battery, and is orderable in a high visibility colored housing. APX NEXT XE has a slightly larger physical form factor than that of the standard APX NEXT. Refer to data sheets for additional details on APX NEXT and APX NEXT XE dimensions and other design specs.
How does the performance and durability of APX NEXT XE compare to other APX XE models?	APX NEXT XE meets the same extreme durability specifications of the APX8000XE and other XE models, including delta-T testing, IP68 dust resistance and submersion (2 meters, 4 hours) and operating temperature of -22F to +140F. See MIL-STD section of data sheet for full list of environmental specs. Additionally, APX NEXT XE brings advanced features and capabilities to and XE radio including high dynamic range microphone technology for clearer audio, longer lasting UL battery, larger color top display, large ultra-durable front touch screen display and LTE capabilities, among all other advanced features APX NEXT has to offer.
How durable is the APX NEXT XE touch screen?	The APX NEXT XE touch screen is built ultra durable, designed for all weather use and extreme environments. The touch screen is built with toughened glass, reinforced with a rigid steel plate underneath and a protective exterior crash bar to withstand various drops and impacts. The device is tested to withstand a 4ft drop to concrete on all faces, edges, and corners, and a 4.6oz steel ball drop from 20in directly onto the display. Additionally, the screen is resistant to false actuation by water, snow, ice, or debris, and can be operated with gloves up to 4mm thick.
What battery ships standard with APX NEXT XE?	APX NEXT XE ships standard with a 4400 mAh UL Div 2 battery while the standard battery for APX NEXT (non-XE) is 4400 mAh (non-UL). The standard battery for APX NEXT XE meets a higher hazardous location certification (HazLoc) rating, certified intrinsically safe for use in Class 1, Division 2 environments. A 5650mAh UL DIV 2 battery is also available as a high capacity battery option.

What colors are available for the APX NEXT XE housing?	APX NEXT XE is available in Impact Green as well as black. Impact Green is a high visibility color option often preferred by fire agencies as it is the most visible color in smoke.
Are APX NEXT accessories compatible with APX NEXT XE?	Many APX NEXT accessories, including batteries, antennas, RSMs and audio accessories (including the XE500 RSM, originally released for APX) are compatible with APX NEXT XE, but there are preferred accessories for use in extreme environments (see question below). Be sure to check accessory specifications and consult your Motorola Solutions representative if considering standalone or alternative accessory options for APX NEXT XE or for use in extreme environments. Due to the larger design and exaggerated controls of APX NEXT XE, specific carry solutions have been designed for APX NEXT XE. Standard APX NEXT carry solutions are not compatible.
What accessories are designed specifically for APX NEXT XE?	The XVE500 RSM is the preferred remote speaker microphone for APX NEXT XE, designed for use in extreme environments, supporting the same functions of the XVP RSM (including ViQi) and advanced environmental specs of the XE500 RSM. The XE500 RSM is also compatible with APX NEXT XE but does not support ViQi. The XVE500 is available as a standalone accessory. APX NEXT XE ships standard with a redesigned holster that includes a belt clip and integrated D-ring for use with a Boston Leather Strap. (2.5" and 3" belt clip options available) A Boston Leather carry case is also available for APX NEXT XE as a standalone option.
Are there any features or capabilities supported by APX NEXT that are not available for APX NEXT XE?	No, APX NEXT XE supports the same features and capabilities that are available with non-XE APX NEXT models. This includes Smart Application Services, frequency bands and band configurations (including multi all-band configurations), LTE networks, antennas, and all other orderable device options available for APX NEXT (not including select accessories). Rather, APX NEXT XE offers several enhancements as noted in the previous question/answers that are not available in standard APX NEXT Models.
Is APX NEXT XE available in Canada?	Yes, APX NEXT XE is available in Canada as well as the US.
APX NEXT XN	
How does the performance and durability of APX NEXT XN compare to other APX NEXT / APX XE models?	APX NEXT XN meets the same extreme durability specifications of the APX NEXT XE, APX8000XE and other XE models. See MIL-STD section of data sheet for full list of environmental specs. It also goes beyond those durability specifications to be certified to the stringent NFPA 1802 requirements for ruggedness and software safety features. See Hazard Zone section of the data sheet for full list of specs. Similar to APX NEXT XE, APX NEXT XN brings the same advanced features and capabilities to the radio including high dynamic range microphone technology for clearer audio, IMPRES2 UL battery, larger color top display, large ultra-durable front touch screen display and LTE capabilities, among all other advanced features APX NEXT has to offer.
What accessories are supported on APX NEXT XN?	Refer to the [accessories catalog](#) for details on APX NEXT XN batteries, RSMs, antennas.

APX N70 XE

What bands does the APX N70 XE ship in?	As of 2025, the APX N70 XE is a single-band device. It is shipping in 7/800 MHz. UHF and VHF to follow.
What accessories can I utilize with APX N70 XE?	Batteries: APX N70 XE ships standard with the UL Div 1 battery. A non-UL version is available that ships with either a Standard or High Capacity battery. Chargers: APX N70 XE uses the same chargers as APX N70. Audio Accessories: The APX N70 XE is compatible with the GCAI mini accessories. New XVE500m RSM microphones are now available that are offered with and without knobs and in Green and Black colors. Antenna: APX N70 XE uses the same antennas as APX N70.
Does the APX N70 XE share accessories with the APX NEXT XE/XN?	No, the APX N70 XE is a smaller form factor device; therefore, it does not share any accessories with APX NEXT XE or XN.
Is APX N70 XE NFPA 1802 /1930 compliant?	No, it is not NFPA 1802 or 1930 compliant, but it is Div 1 UL certified.
Is the APX N70 XE ordered in HazLoc(Hazardous Locations)?	Yes, with Div 1 certification, APX N70 XE is offered in HazLoc.
Can I order the APX N70 XE in green and black housing?	Yes, you can order it in both green and black housing.

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