KEEP PERSONNEL AND COMMUNITIES SAFER

APX MISSION-CRITICAL P25 COMMUNICATIONS
THE BEST OF WHAT WE DO

Whether you’re a state trooper, firefighter, law enforcement officer or highway maintenance technician, people count on you to get the job done. There’s no room for error. This is mission critical.

APX™ radios exist for this purpose. They’re designed to be reliable and to optimize your communications, specifically in extreme environments and during life-threatening situations.

Even with the widest portfolio in the industry, APX continues to evolve. The latest APX NEXT smart radio series delivers revolutionary new capabilities to keep you safer and more effective.

WE’VE PUT EVERYTHING WE’VE LEARNED OVER THE LAST 90 YEARS INTO APX. THAT’S WHY IT REPRESENTS THE VERY BEST OF THE MOTOROLA SOLUTIONS PORTFOLIO. THERE IS NO BETTER.
OUTLAST AND OUTPERFORM
RELIABLE COMMUNICATIONS ARE NON-NEGOTIABLE
APX two-way radios are designed for extreme durability, so you can count on them to work under the toughest conditions. From the rugged aluminum endoskeleton of our portable radios to the steel encasement of our mobile radios, APX is built to last.

HEAR AND BE HEARD
CLEAR COMMUNICATION CAN MAKE A DIFFERENCE
The APX family is designed to help you hear and be heard with unparalleled clarity, so you’re confident your message will always get through. Multiple microphones and adaptive windporting technology minimize noise from wind, crowds and sirens. And the loud and clear speaker ensures you can hear over background sounds.

KEEP INFORMATION PROTECTED
EVERYDAY, SECURITY IS BEING PUT TO THE TEST
With the APX family, you can be sure that your calls stay private, secure, and confidential. APX supports multiple types of standard and custom encryption. The MACE hardware encryption module equipped within an APX radio provides a hardened tamper-resistant chassis for storing encryption keys.

MADE FOR THE MISSION
APX RADIOS ARE INTUITIVE AND EASY TO USE FOR YOUR MISSION
A distinctive “T-grip” shape allows devices to be easily held with gloved hands or in wet environments. Positive action controls minimize the risk of accidental operation, while extreme ergonomic models are designed for specialized conditions. Easy to read displays, day and night, placed just where you need them for ‘at-a-glance’ status, or no display for covert operations.

INTELLIGENCE IN ACTION
AN ECOSYSTEM OF CONNECTIVITY HELPS TO KEEP YOU SAFE
APX radios can prioritize emergency calls, send a signal automatically when they sense “man down” or a collision, provide a Bluetooth® beacon to find missing personnel, and automate responses to specific events or when detecting a geofence. And upon recognizing poor signal quality, APX radios can route voice and data over broadband.
The APX NEXT™ series is our next step in advancing the lifeline. Designed to military standards for extreme ruggedness, the touchscreen works with or without gloves, in rain, dirt, and snow. High Dynamic Range mics and high-power speakers deliver our best audio ever, while SmartConnect keeps you connected beyond your P25 system. The result is a radio that works when you need it, without pause, distraction or doubt.

The APX NEXT series is designed for effortless usability when everything is on the line. Intuitive knobs and buttons can be distinguished by touch. A mission-critical touchscreen makes it fast and easy to operate your radio. The ViQi virtual assistant understands natural language voice commands, giving you eyes-up awareness. Every interaction is simple, fast and logical. You stay focused on what matters: your mission and your safety.

APX NEXT mission-critical apps bring new intelligence to the field. ViQi enables natural language database queries, rapidly delivering vital information to the front line. And as part of our unique, end-to-end public safety ecosystem, new capabilities can be added seamlessly as your needs evolve.

The APX NEXT series gives you back time. A cloud-based provisioning system allows radio managers to prepare radios even before they arrive, while remote updating keeps them in the field, with zero touch and zero downtime, and a range of services helps you manage your operation. With the APX NEXT series, your ownership experience is streamlined, so your valuable resources stay focused and ready.
CHAOS DOESN’T STOP AT BORDERS.
CRIMINALS DON’T RESPECT BOUNDARIES.
SO YOUR COMMUNICATIONS SHOULDN’T BE LIMITED TO LOCAL FREQUENCIES.

With multi-mode access to all four major P25 bands, APX 8000 series radios know no limits when it comes to interoperability. You can work seamlessly with virtually any agency on any P25 system—and all from a single radio. Stay connected further with the high-power configuration of the APX 8500 mobile. And if that isn’t enough – APX 8000 series radios can reroute your P25 communication over available broadband networks and keep you connected when outside of P25 coverage.

Security is more important than ever. Criminals are testing you on the streets and over the air. Fight back with the entire toolbox. Supporting simultaneous multi-protocol encryption and certified to FIPS 140-2 level 3, the APX 8000 series radios keep your critical communications absolutely iron-tight.
APX 6000 SERIES
SINGLE-BAND P25 PORTABLE AND MOBILE RADIOS

THE APX 6000 IS BUILT ON DECADES OF PUBLIC SAFETY EXPERIENCE TO DELIVER EFFORTLESS COMMUNICATION WHEN YOU NEED IT THE MOST.

For a single-band radio, the APX 6000 series does not lack in features. From ergonomics to audio quality, these radios are designed to outperform.

A non-slip T-grip shape sets the portable radio firmly in your hands while optimized placement of button and knobs offer immediate access to radio controls. Need to find the emergency button? Simply slide your hand down the portable radio antenna or reach for the top right corner of the mobile.

The APX 6000 picks up your speech from any direction and then the innovative APX Adaptive Audio Engine applies exactly the right amount of processing: enough to remove background noise, but not enough to degrade speech quality. Dynamically adjusting its algorithms as external conditions change, the APX 6000 automatically gives you the best audio that's possible.

Out on the streets, APX 6000 series radios are ready to take all the abuse you can throw at them. A rugged aluminum endoskeleton protects portable radios against drops, water and dust, while the steel shell helps mobile radios survive impacts. Because when your life is on the line every day, you can’t afford to carry an ordinary radio.

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APX 6000XE
RELIABLE. RESPONSIVE. READY FOR THE EXTREMES.
Single-band portable radio for fire and rescue teams.

APX 6000
RELIABLE. RESPONSIVE. READY FOR ANYTHING.
Single-band portable radio for first responders.

SRX 2200
RELIABLE. RESPONSIVE. READY FOR ACTION.
Single-band portable radio for military teams.

APX 6500
RELIABLE. RESPONSIVE. READY FOR THE STREETS.
Single-band mobile radio.
APX 3000 AND APX 4000 SERIES
SINGLE-BAND P25 PORTABLE AND MOBILE RADIOS

P25 RELIABILITY AND PERFORMANCE WITH SOME OF OUR MOST POPULAR FEATURES.

You need P25 technology and you need the legendary reliability and performance of an APX radio, but you may not need all the features of a high-tier radio. The APX 4000 and 3000 series radios seamlessly connect agencies and departments throughout your city for fast, interoperable communications.

Built on a rugged, reliable platform, the APX 4000 is engineered to survive in the real world, with a screen made from tough Gorilla Glass. Equipped with dual microphones, noise cancellation and powerful audio processing the APX 4000 delivers great audio in noisy conditions.

With no display or speaker, the APX 3000 is designed to be used with earpieces and remote PTT buttons for covert operations.

But we know its not just about the audio and reliability, which is why we also included advanced features - like hardware-based encryption, Mission-Critical Bluetooth, GPS location-tracking and IMPRES smart battery support.

APX 4000XH
BUILT SAFE. INSIDE AND OUT.

APX 4000
BETTER EQUIPPED FOR CLOSER COLLABORATION.
Single-band portable radio for first responders.

APX 3000
STAY SAFE, CONNECTED AND DISCREET
Specialized covert radio for undercover teams.

APX 4500
BETTER EQUIPPED FOR CLOSER CONNECTIVITY.
Single-band mobile radio.
From city festivals to natural disasters, seamless communication is critical to coordinating effective and safe responses. The APX 900 and APX 1000 series radios are simple to use and are certified for reliable P25 communication on P25 compliant radio networks.

The APX 1000 comes with a simplified feature set that’s easily accessible through the one-knob user interface; it’s a radio that your teams will quickly master.

The APX 900 provides additional ruggedness and complies with P25 encryption algorithms, so you can collaborate confidently and securely between agencies.

The APX 1500 mobile radio provides rugged simplicity with built-in loud and clear speaker, full color display and single knob controls. This self-contained dash-mount configuration is easy to install in most vehicles.
APX ACCESSORIES

ENERGY  AUDIO  CARRY

MOBILE  COVERT

APX CONTROL HEADS

MOBILE RADIOS ARE IDEAL FOR MANY APPLICATIONS, FROM A SIMPLE IN-CAR INSTALLATION, TO A WEATHERPROOF MOTORCYCLE MOUNT, TO A MULTI-HEAD FIRE TRUCK SYSTEM, TO A DESKTOP DISPATCH POSITION. WHATEVER YOU NEED, OUR PORTFOLIO OF CONTROL HEADS HELPS YOU GET THE MOST FROM YOUR RADIO.

INTEGRATED MULTI-FUNCTIONALITY
The O7 is a sophisticated control head with a color display and built-in keypad. It can integrate with your vehicle controls for a single ergonomic interface.

BEST-IN-CLASS READABILITY
The E5 control head has a bright hi-res display combined with intelligent use of colors to provide all the information you need at-a-glance, day or night.

EXTREME USABILITY
The O2 control head provides rugged simplicity for efficient and confident communication.

HANDHELD FLEXIBILITY
The O3 corded control head fits all your mobile controls in your hand. With the O3 your radio controls are never out of reach.

BROCHURE | APX P25 COMMUNICATIONS
### APX PORTABLE RADIOS

#### FREQUENCY BANDS

<table>
<thead>
<tr>
<th>Frequency Band</th>
<th>SMART</th>
<th>ALL-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>VHF</td>
<td>(Y)</td>
<td>(Y)</td>
<td>-</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>UHF Range 1</td>
<td>(Y)</td>
<td>(Y)</td>
<td>-</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>UHF Range 2</td>
<td>(Y)</td>
<td>(Y)</td>
<td>-</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>700/800 MHz</td>
<td>(Y)</td>
<td>(Y)</td>
<td>-</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>900 MHz</td>
<td>(Y)</td>
<td>-</td>
<td>-</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>8000 MHz</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### All-Band (Y)

- VHF, UHF R1, UHF R2, 700/800 simultaneously

#### Number of Channels

- Maximum number of channels programmable
  - SMART: 3000
  - ALL-BAND: 3000
  - SINGLE-BAND: 1000 (3000)

#### OPERATIONS MODES

- Analog Conventional: FM analog non-trunked communications
  - (Y)
  - (Y)
  - (Y)
  - (Y)

- Digital P25 Phase I: DMR, Conventional and Trunking
  - (Y)
  - (Y)
  - (Y)

- Digital P25 Phase II: TDMA Trunking
  - (Y)

- Dynamic Dual Mode: Automatic switching between P25 Phase I and II
  - (Y)
  - (Y)
  - (Y)

- IVBD: Integrated Voice and Data
  - (Y)
  - (Y)
  - (Y)

#### ENVIROMENTAL

- Ingress Protection: Sealing against dust and water
  - IP68: 2 m, 4 hr

- Delta T Testing: Differential temperature sealing test
  - APX 8000H & 8000 - (Y)
  - IP67: 4 hr

- HazLoc: Hazardous location certification
  - Class I, Div 1 & 2

#### AUDIO

- Adaptive Audio Engine: Dynamic optimization of noise suppression
  - (Y)

- Number of Microphones: Support for multi-mic noise suppression
  - 3

- Output Power: Maximum rated audio power
  - 3 W

#### SECURITY SAFETY

- Algorithms: Supported encryption algorithms
  - (256-bit AES, ADP, DES, DES-XL, DES-OFB, DVP-XL)
  - (256-bit AES, ADP, DES, DES-XL, DES-OFB, DVP-XL)
  - (256-bit AES, ADP, DES, DES-XL, DES-OFB, DVP-XL)

- Multikey: Number of programmable keys
  - 128

- Encryption Standards: Level of encryption offered
  - FIPS 140-2 Level 3
  - 48

- Over-the-Air Refueling: Remote update of encryption keys
  - (Y)

#### CONNECTIVITY

- Broadband: Broadband network support
  - LTE, WiFi

- SmartConnect: Secure personal area network, for wireless accessories
  - (via LTE)

- Bluetooth: Secure personal area network, for wireless accessories
  - (via WiFi)

- Data Modem Tethering: Data offload to external modem via WiFi
  - (Y)

#### LOCATION TRACKING

- GPS/GLO/NSS: Receiver for radio location-tracking
  - (Y)

- Mission-Critical Geofence: Automated responses to changes in radio location
  - (Y)

- SmartLocate: Route location data over broadband
  - (Y)

#### OTHER FEATURES

- VIA Virtual Partner: Database query using virtual assistant
  - (Y)

- SmartMessaging: Multimedia messaging
  - (Y)

- Voice Announcement: Announcement of change in radio status
  - (Y)

- Inteligent Lightning: Programmable display backlight color alert
  - (Y)

- Instant Recall: Replay of last received call
  - (Y)

- Main Down: Programmable response to movement & orientation
  - (Y)

- IMPRES / IMPRES 2: Intelligent battery and charging technology
  - N/Y

#### DISPLAY & KEYPAD CONFIGURATION MODELS

- 4.5: Touchscreen and top display
  - Y

- 3.5: Front display, full keypad, top display
  - (Y)

- 2.5: Front display, limited keypad, top display
  - (Y)

- 1.5: Top display only
  - (Y)

- Band: Front display, full keypad
  - (Y)

- Front display, limited keypad
  - (Y)

#### BROCHURE | APX P25 COMMUNICATIONS
## APX MOBILE RADIOS

<table>
<thead>
<tr>
<th>FREQUENCY BANDS</th>
<th>ALL-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>VHF</td>
<td>Y</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>UHF Range 1</td>
<td>Y</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>UHF Range 2</td>
<td>Y</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>700/800 MHz</td>
<td>Y</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>900 MHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All-Band</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Channels</td>
<td>Max number of channels programmable</td>
<td>3000</td>
<td>1000 (3000)</td>
<td>512 (1000)</td>
</tr>
<tr>
<td>High-power Version</td>
<td>Availability of 110 W radio variant</td>
<td>(Y)</td>
<td>-</td>
<td>-</td>
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</table>

<table>
<thead>
<tr>
<th>OPERATION MODES</th>
<th>ALL-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog Conventional</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>-</td>
</tr>
<tr>
<td>Analog Trunking</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
<td>-</td>
</tr>
<tr>
<td>Digital P25 Phase I</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
<td>Y</td>
</tr>
<tr>
<td>Digital P25 Phase II</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
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<tr>
<td>Dynamic Dual Mode</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>IV&amp;D</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<table>
<thead>
<tr>
<th>AUDIO</th>
<th>ALL-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
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</thead>
<tbody>
<tr>
<td>Audio Output Power</td>
<td>Maximum rated audio power</td>
<td>7.5 W, 8 Ω</td>
<td>7.5 W, 8 Ω</td>
<td>7.5 W, 8 Ω</td>
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<table>
<thead>
<tr>
<th>SECURITY, SAFETY</th>
<th>ALL-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
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</thead>
<tbody>
<tr>
<td>Algorithms</td>
<td>(256-bit AES, ADP, DES, DVP)</td>
<td>(256-bit AES, ADP, DES, DVP)</td>
<td>(256-bit AES, ADP, DES, DVP)</td>
<td>256-bit AES SW, ADP</td>
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<tr>
<td>Algorithm Capacity</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
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<tr>
<td>Multikey</td>
<td>128</td>
<td>64</td>
<td>8</td>
<td>B</td>
</tr>
<tr>
<td>Method</td>
<td>Hardware &amp; Software</td>
<td>Hardware &amp; Software</td>
<td>Hardware &amp; Software</td>
<td>Software</td>
</tr>
<tr>
<td>Encryption Standards</td>
<td>Level of encryption offered</td>
<td>FIPS 140-2 Level 3</td>
<td>FIPS 140-2 Level 3</td>
<td>FIPS 140-2 Level 3</td>
</tr>
<tr>
<td>Over-the-Air Rekeying</td>
<td>Remote update of encryption keys</td>
<td>(Y)</td>
<td>(Y)</td>
<td>-</td>
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<table>
<thead>
<tr>
<th>CONNECTIVITY</th>
<th>ALL-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>WiFi</td>
<td>Local area network support</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>SmartConnect</td>
<td>Seamless switch between P25 and broadband</td>
<td>(tethered, or via Wi-Fi)</td>
<td>(tethered, or via Wi-Fi)</td>
<td>-</td>
</tr>
<tr>
<td>Data Modem Tethering</td>
<td>Data offload to external modem such as LTE, Wi-Fi or satellite</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
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</table>

<table>
<thead>
<tr>
<th>LOCATION-TRACKING</th>
<th>ALL-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
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</thead>
<tbody>
<tr>
<td>GPS/GLONASS</td>
<td>Receiver for radio location-tracking</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Mission-Critical Geofence</td>
<td>Automated responses to changes in radio location</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
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</table>

<table>
<thead>
<tr>
<th>OTHER FEATURES</th>
<th>ALL-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>VQA Virtual Partner</td>
<td>Database query using virtual assistant</td>
<td>(Y)</td>
<td>(Y)</td>
<td>-</td>
</tr>
<tr>
<td>RFID</td>
<td>Embedded wireless inventory tracking tag</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>Voice Announcement</td>
<td>Audio announcement of change in radio status</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Instant Recall</td>
<td>Replay of last received call</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Intelligent Lighting</td>
<td>Programmable display backlight color alert</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
</tr>
<tr>
<td>Impact Detection</td>
<td>Automatic alert to a collision</td>
<td>(Y)</td>
<td>(Y)</td>
<td>(Y)</td>
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<table>
<thead>
<tr>
<th>CONTROL HEAD COMPATIBILITY</th>
<th>ALL-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
<th>SINGLE-BAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>O7 Enhanced Control Head</td>
<td>(Y)</td>
<td>(Y)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>E5 Control Head</td>
<td>(Y)</td>
<td>(Y)</td>
<td>-</td>
<td>-</td>
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<tr>
<td>D5 Standard Control Head</td>
<td>(Y)</td>
<td>(Y)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>O3 Handheld Control Head</td>
<td>(Y)</td>
<td>(Y)</td>
<td>-</td>
<td>-</td>
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<tr>
<td>O2 Rugged Control Head (Green/Gray)</td>
<td>(Y)</td>
<td>(Y)</td>
<td>Y</td>
<td>Gray Only</td>
</tr>
</tbody>
</table>

( ) indicates optional feature
ALL THE SUPPORT YOU NEED
MANAGE YOUR APX RADIOS IN THE WAY THAT SUITS YOU BEST

Motorola Solutions offers flexible services consumption options to manage your mission critical communication systems. From hardware repair to preventive maintenance, technical support to programming and provisioning, our services ensure that your radio fleet is fully operational and available for end-users. The services are centrally delivered with the right combination of people, process and tools.

For more information, please visit us on the web at: www.motorolasolutions.com/APX