

# YOUR RADIO HAS ONE JOB: TO KEEP YOU SAFE



**MOTOROLA APX™ PORTABLE RADIOS  
SAFETY REDEFINED**





## YOU ARE READY FOR THE NEXT CALL. WITH APX, SO IS YOUR RADIO.

In an emergency, other first responders may be ten feet or ten miles away. When every second counts, you need a radio you can rely on to get the job done. Since coordinating response and protecting lives is at the heart of every mission, every two-way radio transmission is crucial. And every radio has one job to do: keep you safe.

The APX P25 mission critical two-way radio series redefines safety in portable communication. From the fire line to the factory line, APX puts the right device into the hands of the right user. Every feature and function is designed with its users in mind – from the rugged, easy to operate design to the loudest, clearest audio. The result is the ability to keep your people and community safer than ever before.

## THE WORLD'S LEADING P25 PLATFORM



ASTRO 25 is the leading Project (P25) standards-based, mission critical system used by over 11,000 agencies around the world. With uncompromising real-world performance and legendary Motorola reliability, the ASTRO 25 solution continues to evolve, adding practical innovations and performance-driven capabilities that enable government agencies to protect the communities they work in and support neighboring communities through interoperability.

### **IMMEDIATE AND ASSURED VOICE IN AN EMERGENCY**

When the emergency is critical, a call for help must get through. Motorola's ASTRO® 25 system is a dedicated, communication system optimized for the needs of public safety to make sure the voice call gets through even during times of peak demand.

### **ACCESSIBILITY IN CHALLENGING ENVIRONMENTS**

Tunnels, high rises and sub-basements create unique challenges for wireless communications, but ASTRO 25 is optimized to handle them. We offer unique solutions to minimize interference in specific environments.

### **RELIABLE VOICE AND DATA INTEGRATED AS ONE**

ASTRO 25 provides reliable, always-available communications so multiple agencies can share voice and data communication among their teams, deploy resources efficiently, maintain communication security and track personnel.

### **FUTURE READY PLATFORM**

ASTRO 25 and APX portable radios are flexible and future-ready, adapting to your communications needs and evolving to support new technologies and applications, so you can be ready for the next call the moment it happens.

### **INTEROPERABILITY ON DEMAND**

APX portables work across multiple P25 systems and digital and analog networks to achieve true interoperability. For multiband operation, the APX 7000 series offers seamless interoperability through any two frequency bands.

**AT ANY MOMENT...**  
**A SEMI WILL JACKKNIFE ON THE HIGHWAY**  
**A WATER MAIN WILL RUPTURE**  
**A FIRE WILL SPREAD THROUGH A WAREHOUSE**

**YOUR MOMENT IS COMING.**  
**WHEN YOU NEED MISSION CRITICAL COMMUNICATIONS,**  
**WHO WILL YOU RELY ON?**



**POLICE PULL OVER A SUSPICIOUS VEHICLE**



**FIREFIGHTERS RACE TO A FOUR-ALARM FIRE**



**ICE STORM TAKES DOWN POWER LINES**



**WILDLAND FIRE ERUPTS IN THE MOUNTAINS**

**OFFICERS NEED TO QUICKLY GATHER INFORMATION FOR IMPROVED DECISION MAKING**

- Quick database query reveals an outstanding warrant
- Alert dispatch to the situation
- Dispatcher locates closest back-up support
- Back-up arrives and an arrest is made

**APX DELIVERS RELIABLE VOICE AND DATA**

- Reliable voice communications
- Real-time advanced messaging
- GPS location tracking
- Secure end-to-end encrypted communications

**FIRST RESPONDERS MUST INTEROPERATE WITH MULTIPLE AGENCIES**

- Apparatus from multiple departments are dispatched
- Coordinate operations on the fireground
- Hear and talk clearly above pumper trucks, diesel engines, and sirens
- Communicate with incident command over PASS alerts and chainsaws

**APX DELIVERS LOUD, CLEAR AUDIO**

- Best-in-class audio that is the loudest and clearest in the industry
- 2-microphone dual-sided, noise-canceling technology on the radio and XE RSM
- Audio profiles for different environments

**UTILITY CREWS MUST WORK IN HARSH WEATHER AT DISPERSED SITES**

- Interoperate with police and public works for road closures on multiband radios
- Operate radio controls with gear and heavy gloves on
- Quickly distinguish radio controls in rough weather and darkness

**APX DELIVERS EASY-TO-USE DESIGN**

- Unique T-Grip design with well-positioned controls that are easily differentiated
- Seamless interoperable communications with multiple frequency bands, Motorola legacy systems, P25 Phase 1 and P25 Phase 2 systems
- Smallest P25 Phase 2 and multiband portable radios in the industry

**FIREFIGHTERS MUST COMMUNICATE IN EXTREME CONDITIONS**

- Report to incident command from rough terrain
- Use radios in hot, smoky, dirty and windy conditions
- Communicate clearly over helicopters, chainsaws, diesel engines
- Know radios will perform if they get dropped, drenched or shocked

**APX DELIVERS RUGGED RELIABILITY**

- Over 80 years of real-world product experience and testing
- Meets or exceeds stringent MIL-STD specifications
- Fully-sealed, high strength internal chassis for improved robustness
- High impact, scratch resistant, optically pure glass display

# THE MOST COMPLETE LINEUP OF SAFETY-FOCUSED PORTABLES

With budgets tight, agencies expect that every dollar invested must deliver maximum value and performance. From day one, every APX portable will meet your most demanding performance expectations.



## APX 7000

- Multiband operation
- Best-in-class audio<sup>1</sup>
- Future expandability

Premier portable with leading technology for the most demanding conditions. Ideal for agencies requiring multiband interoperability and future expandability.



## APX EXTREME SERIES

### APX 7000XE, APX 6000XE and XE RSM

- Extreme Ergonomics
- Rugged Specifications
- Extreme Audio

Designed for extreme environments with exaggerated controls and an extreme audio profile. Ideal for agencies requiring extreme ergonomics and rugged specifications.



## APX 6000

- Advanced features
- Excellent audio<sup>2</sup>
- 3 rugged models

A smart investment delivering leading edge technology in a lightweight design. Ideal for agencies requiring advanced features in a single band radio. Reduced feature set models are available (APX 6000Li).



## APX 4000

- Compact form factor
- Key features
- Durable design

Durable and compact with basic features in an easy to use design. Ideal for agencies users requiring a budget friendly P25 solution.

	APX 7000	APX 7000XE	APX 6000	APX 6000XE	APX 4000
Channel Capacity	2000 dual display	96 top display	870 dual display	870 dual display	512 front display
System Personalities	100	100	100	100	100
Models	2	1	3	3	2
P25 Operation	Phase 1 - FDMA Phase 2 - TDMA	Phase 1 - FDMA Phase 2 - TDMA	Phase 1 - FDMA Phase 2 - TDMA	Phase 1 - FDMA Phase 2 - TDMA	Phase 1 - FDMA Phase 2 - TDMA
SmartNet/SmartZone/ Omnilink Operation	✓	✓	✓	✓	✓
Multiband Operation	✓	✓			
Integrated GPS location	✓	✓	✓	✓	✓
POP25	✓	✓	✓	✓	✓
Bluetooth Enabled	Option	Option	Option	Option	Option
3rd Party Application Support	✓	✓	✓	✓	
Man Down	✓	✓	✓	✓	✓
Intelligent Lighting	✓	✓	✓	✓	✓
Radio Profiles	✓	✓	✓	✓	✓
Text Messaging	✓	✓	✓	✓	✓
Removable Memory	✓	✓			
Voice Announcement	✓	✓	✓	✓	✓
Encryption	✓	✓	✓	✓	SINGLE ALGORITHM
OTAR	✓	✓	✓	✓	TACTICAL ONLY
Full Color Display	✓		✓	✓	✓
Top Display	✓	✓	✓	✓	
Option slot	✓	✓			
Adaptive Noise Suppression	✓	✓	✓	✓	✓
Dual Microphones	✓	✓	✓	✓	✓
Dual Speakers	✓				
1 watt high audio speaker	✓	✓			
Rugged <sup>3</sup>	Option	Standard	Option	Standard	IP67
Colored Housings	✓	✓	✓	✓	
Hazloc Rating	✓	✓	✓	✓	✓
IMPRES Audio	✓	✓	✓	✓	✓
IMPRES Energy	✓	✓	✓	✓	✓

<sup>1</sup> Best-in-class audio - 2 mic noise suppression + 1 watt speaker

<sup>2</sup> Excellent audio - 2 mic noise suppression + 500 mW speaker

<sup>3</sup> Rugged radios exceed industry standards (IPx7) for submersibility and provide a higher level of water protection—MIL-STD-810E, Method 512.3 Immersion.

## ADVANCED SOFTWARE FEATURES

### INTELLIGENT LIGHTING

Uses color alerts to notify you of the radio mode, potential emergencies or specific events.

### RADIO PROFILES

Radios can be configured to adjust audio level, lighting and tones through user selected or automated options. Whether on surveillance or working in bright sunlight, you can customize settings as needed.

### EXTREME AUDIO PROFILE

Intelligent 2-microphone noise reduction software and the latest AMBE vocoder dynamically adjusts for changing high noise environments.

### TEXT MESSAGING

Offers a freeform or canned messaging solution so you can efficiently and discreetly send and receive messages to and from subscribers or dispatch operators.

### UNIFIED CALL LIST

Consolidates all call lists underneath one unified list so you can easily access all information associated with a particular contact.

### VOICE ANNOUNCEMENT

Allows you to navigate through channels/talk-groups and zones in the radio while an audible, pre-recorded voice file provides a description of the selected channel or zone.

## ADVANCED HARDWARE FEATURES

### P25 TDMA CAPABLE

Provides twice the voice capacity, so you can add more users to your system without the need for additional frequencies or infrastructure.

### MULTIBAND OPERATION

Multiple frequency bands supported with best-in-class transceiver specifications and performance.

### SEAMLESS SCAN

Seamless scanning of multiple protocols including FDMA and TDMA systems and multiple RF bands.

### GPS LOCATION

Integrated GPS receiver can transmit the outdoor location of an individual or vehicle to map-based location software.

### MISSION CRITICAL WIRELESS

A unique Bluetooth® solution that provides an encrypted link to high performance accessories and applications to support different mission critical environments.

### ENCRYPTION

FIPS certified encryption hardware provides secure communications in a tamperproof solution.



## FUTURE READY

### EXPANSION SLOT

Ability to add option cards, such as Bluetooth® and other future data applications, to upgrade to the latest applications.

### MEMORY

Equipped with 64 MB of industrial grade internal memory and a removable memory MicroSD card slot. The removable memory card allows future expandability for growing technology needs.

### PROGRAMMING OVER PROJECT 25

Motorola's POP25 solution allows subscriber radios to be programmed over the air via the ASTRO 25 systems while remaining in the field without interrupting voice operations.



**“WE HAVE THE ADVANTAGE OF LEARNING FROM FIRST RESPONDERS AROUND THE GLOBE, IN DIFFERENT ENVIRONMENTS AND DIFFERENT TYPES OF SITUATIONS. SO WE CAN DESIGN RADIOS AND ACCESSORIES THAT EXCEED REAL-WORLD DEMANDS.”**

Bruce Claxton, Senior Director, Design Integration

# SAFETY DOESN'T STOP WITH THE RADIO

Extend the power and reliability of your radio with the only complete line of accessories designed, tested and certified for optimal performance with APX portables. Whether it's our industry-leading RSM with noise-cancelling technology for loud, clear communications or a Mission Critical Wireless Bluetooth earpiece for secure, discreet conversations, our accessories are so comprehensive and flexible, you can trust them to work overtime with your APX radio.

## IMPRES™ SMART AUDIO ACCESSORIES

### EXCEPTIONALLY CLEAR AUDIO

IMPRES audio accessories communicate with your radio to help suppress ambient noise, improve voice intelligibility and amplify loudness – even in noisy situations and difficult weather.

### ADJUSTS TO EXTERNAL NOISE

When you need to speak quietly or at normal volume but not directly into the microphone, enhanced Automatic Gain Control (AGC) makes all the difference. It detects changes in voice levels from the individual talking, then increases or decreases microphone gain so the listener hears you clearly regardless of how loudly or quietly you are talking into your radio.

### INDUSTRY-LEADING REMOTE SPEAKER MICROPHONES (RSMs)

The APX Display RSM delivers the best-in-class accessory audio available. It's clearer, easier to understand, and up to 50% louder than XTS-series RSMs because it has the same speaker as APX portables and features IMPRES technology to suppress background noise, improve voice intelligibility and amplify loudness.

The XE RSM is ruggedized and specialized for the extreme rigors of firefighting, with advanced ergonomics and special innovations to improve responder safety. From exaggerated, glove-friendly controls to exceptional noise suppression, it's made for the toughest days.

## IMPRES SMART ENERGY SYSTEM

### AUTOMATES BATTERY MAINTENANCE AND ELIMINATES OVERCHARGING

IMPRES integrates reconditioning capability into the charger along with the means to evaluate battery usage and determine the best time to recondition it. By automating maintenance, IMPRES optimizes battery life. If radios are accidentally left in the charger, there's no worry about damaging batteries or shortening their life. Because the IMPRES charger automatically monitors battery capacity, batteries are safely charged and always ready to go.

### BETTER DATA FOR BETTER DECISIONS

IMPRES batteries store critical usage information so you don't have to. Each IMPRES charger display presents key data at a glance, so you can make informed decisions about battery replacement. If you're operating a large number of devices, IMPRES Battery Fleet Management collects and consolidates data automatically to identify when individual batteries need to be replaced.



# APX P25 TWO-WAY RADIOS. SAFETY REDEFINED.



## **MOTOROLASOLUTIONS.COM/APX**

### **WHEN YOU NEED SUPPORT, WE ARE THERE**

We have teams of dedicated people ready to serve you, from designing a system to installing and servicing equipment to monitoring your system 24/7. Our System Support Center monitors over 500 systems and 4,000 sites, providing customers with real-time information. When questions come up, we answer them quickly – 85% are closed the same day.

### **TECHNOLOGY THAT'S SECOND NATURE™**

APX P25 two-way radios are part of the Next Generation Public Safety Mission Critical Portfolio of products that offer seamless connectivity between first responders. Motorola puts real-time information in the hands of public safety personnel to provide better information that enables better decisions for better outcomes. It's Technology That's Second Nature™.

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