







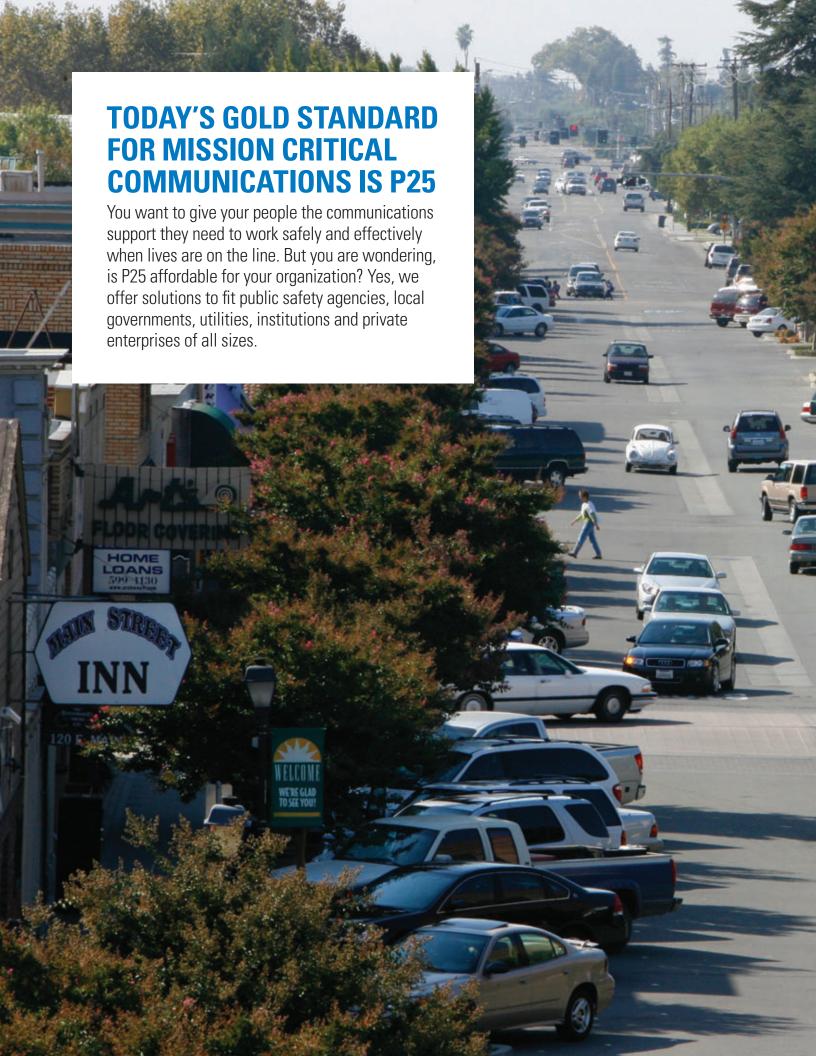






# PROJECT 25 SYSTEMS THAT ARE SIZED RIGHT AND FUTURE READY

**MOTOROLA ASTRO® 25 SCALABLE SOLUTIONS** 



# ARE YOU PREPARED TO RESPOND? PROJECT 25 MISSION CRITICAL COMMUNICATIONS ARE THE RIGHT CHOICE FOR ALL TYPES OF AGENCIES

#### THE RIGHT INFORMATION FOR IMPROVED SITUATIONAL AWARENESS

A city wants to enable its police, fire and EMS personnel to make smart decisions on the spot. An ASTRO 25 system with integrated data provides text messaging, outdoor location and programming over P25. Computer-aided dispatch and automatic vehicle location help them reach the scene quickly — prepared to take action because dispatchers armed them with information while they were still en route.

#### **COVERAGE AND INTEROPERABILITY FOR CAMPUS SECURITY**

When campuses are counting on the university security force to keep them safe, the radio system should earn an "A+" for coverage and reliability. An ASTRO 25 system keeps campus police in touch using the same mission critical features other police officers depend on, including radios with a one-touch "emergency" button to summon backup. When events require a coordinated response, the campus system can interoperate with the P25 networks of local and state police departments.

#### SECURE COMMUNICATIONS FOR CORRECTIONAL INSTITUTIONS

A prison needs to protect radio traffic from unauthorized listeners. A Bryne grant from the DOJ provides funding for an ASTRO 25 system and radios with AES encryption and FIPS certification. Since the prison and local police both operate P25 systems on the same radio frequency, guards can communicate with police to coordinate event response.

#### RELIABLE COMMUNICATIONS FOR PORT SECURITY

It takes a tough network to handle port security operations efficiently. It takes an ASTRO 25 trunked integrated voice and data system with P25, rugged subscriber equipment and centralized network security and management to address operational requirements. When security issues arise, your personnel can interoperate with other federal, state and local public safety agencies for guick response.

#### **EMERGENCY INTEROPERABILITY WITH LOCAL PUBLIC SAFETY**

An electric utility wants its own radio system, but also needs the ability to communicate on a county-wide P25 public safety network as part of the local emergency plan. An ASTRO 25 system makes it work. Critical personnel utilizing P25 radios can easily switch to operate on the regional network. With the addition of an ISSI gateway, the utility can keep its dispatch center in contact with personnel who are operating on the regional network during an emergency.









# THE WORLD'S LEADING P25 PLATFORM BUILT FOR YOUR ORGANIZATION

## ASTRO 25 PULLS IT ALL TOGETHER. MULTIPLE CONFIGURATIONS. MULTIPLE RADIO FREQUENCIES. VOICE AND DATA. TRUNKED AND CONVENTIONAL. SO MANY CHOICES.

The architecture begins with a core system that manages command and control, radio access and interoperability with other networks. You can add capabilities in a modular fashion as needed.

#### **ASTRO 25 CORE – FLEXIBLE, SCALABLE, SIZED RIGHT**

#### **RADIO ACCESS**

- P25 PHASE 1 DIGITAL CONVENTIONAL OR TRUNKING
- P25 PHASE 2 TDMA TRUNKING
- INTEGRATED DATA
- ANALOG CONVENTIONAL
- MUTUAL AID

#### **INTEROPERABILITY**

- P25 NETWORK TO NETWORK ISSI
- MULTI-BAND RADIOS
- MULTI-MODE RADIOS

#### **COMMAND AND CONTROL**

MCC 7500 IP WIRELINE CONSOLE

## IP-BASED SOLUTIONS FOR CRITICAL COMMUNICATIONS

ASTRO 25 delivers a fast, comprehensive communications solution using enhanced network architecture to ensure optimum call set up and availability. With its modular approach, users can deploy core services and expand features and coverage in line with operations/business requirements.

#### **INTEROPERABILITY**

Establish links with other radio systems within your organization and with other entities for coordinated response everyday or when disaster strikes In addition to multi-mode talkgroups and multiband radios, your users can roam on to other P25 systems while still maintaining a connection to the home system with a Project 25 ISSI wireline interface.

#### PRESERVE YOUR INVESTMENT

Add data capabilities, sites and consoles. ASTRO 25 is flexible and expandable so you can tailor it to meet your needs today and build upon it in the future, allowing reuse of your existing equipment.

#### **LEVERAGE FUNDING OPPORTUNITIES**

Investments in ASTRO 25 systems qualify for many grant programs administered by the U.S. Department of Justice and Department of Homeland Security. Grant money is available and Motorola can assist you in locating and applying for financial assistance.

## SCALABLE IN SIZE AND FEATURES

Modular, scalable solution for voice only to full system capability, from single site to multi site.

# PROVEN CAPABILITY AND FEATURE SET

With over 300 trunked systems and thousands of conventional systems used by public safety agencies around the world the ASTRO 25 system is a proven system with advanced features.

## FROM THE GROUND UP AN INTEGRATED SOLUTION

ASTRO 25 is a complete end-to-end system, designed and engineered by the leading supplier of public safety P25 communication systems.

# ENHANCE YOUR VOICE COMMUNICATIONS WITH DATA

#### POP25 (PROGRAMMING OVER P25)

Keep your radios on the job, not in the shop. Quickly reconfigure your entire fleet of radios over the airwaves while they remain operational in the field.

#### **TEXT MESSAGING**

Give users the ability to share detailed information in noisy environments and in situations where they don't want to be overheard. Sending a text instead of making a voice call frees up capacity for other calls.

#### **LOCATION**

Where are your people? Pinpoint the geographic location of every radio so dispatchers can deploy the nearest unit for quick response and swiftly send help when a user needs backup.

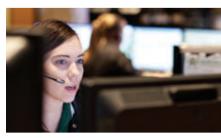
#### FIRE STATION ALERTING

Automate the connection between dispatchers and fire houses to shave precious seconds off your response times.

#### **OVER-THE-AIR REKEYING (OTAR)**

Keep your communications secure with encryption keys that update over the air without the delays, inconvenience or administrative costs of having users bring their radios into the shop for manual rekeying.







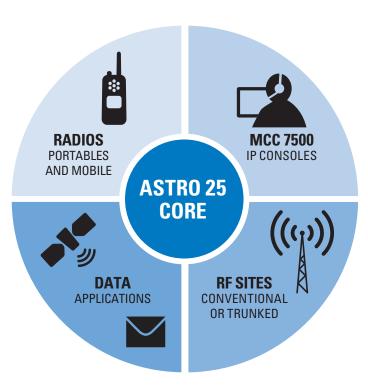




# CHOOSE A SOLUTION YOU CAN COST JUSTIFY TODAY

## WE LISTENED WHEN YOU TOLD US YOU NEED A FEATURE RICH SYSTEM MATCHED TO YOUR CAPACITY NEEDS.

We've introduced new scalable configurations so now you can choose a solution that fits whether it's a single site with a single channel – or multiple sites with hundreds of channels – or anywhere in between. The same high quality you expect from Motorola is available in a system you can afford.



#### **CORE CONFIGURATIONS**

The ASTRO 25 core provides the heart and brains of your network. We will help you choose the configuration that best reflects your current and near-future needs in terms of capacity and features. Choose a core for conventional or trunked system. Start as an independent entity and grow or join a regional system in the future.

## ASTRO 25 EXPRESS TRUNKING AND CONVENTIONAL SINGLE SITE

ASTRO 25 Express is a stand alone solution for single site trunked networks. Conventional stand alone channels are also available. These are entry point solutions in the ASTRO 25 portfolio and in the future, you can deploy an ASTRO 25 core when you want to add more sites, data capabilities, IP consoles, centralized network management tools or other core features.

#### FIELD USER EQUIPMENT

Motorola offers the largest portfolio of Project 25 radios from the XTS/XTL™ family of radios to the newest series of rugged and reliable APX™ radios. The APX 5000/5500 is our smallest and lightest P25 Phase 2 TDMA radio featuring GPS, OTAR, encryption, an intuitive user interface and smart accessories.

#### **DISPATCH IP CONSOLES**

With an ASTRO 25 core, you can deploy Motorola MCC 7500 IP Consoles and have secure end-to-end encryption for all traffic between operators and field users. The graphical user interface is similar to the CENTRACOM™ Gold Elite interface many operators already know so dispatchers can quickly transition to the MCC 7500 Console with minimal retraining.



# STAY FOCUSED ON YOUR MISSION LET US HANDLE THE RADIO SYSTEM

Our team of experts can assist at every step. We're with you from initial needs assessment through network design, project management at installation and ongoing maintenance and upgrades. We'll discuss which services are right for you given the resources you have on hand and the challenges you face.

#### SYSTEM MANAGEMENT

A suite of system management applications from product level fault management to full featured system management provides a bird's eye view of the entire network. Identify and troubleshoot problems, fine-tune performance, monitor security and assess the health of the network. Your own administrative personnel can learn to manage the network, or you can outsource the service to our team of technicians who are on the job 24x7x365. When you have questions, there's just one phone number to call and we'll take it from there.

#### **SECURITY AND ENCRYPTION**

ASTRO 25 solutions offer the protection inherent in digital communications. Where even greater security is required, ASTRO 25 offers a number of enhancements including radio authentication and support for end-to-end encryption.

#### **INFORMATION ASSURANCE**

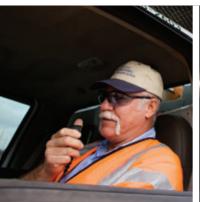
Over and above the end-to-end digital encryption provided by ASTRO 25, our Information Assurance (IA) services team can help you deploy advanced core, site and perimeter security as needed.

#### **LOCAL PRESENCE**

Sometimes you need a person on site. With Motorola, you're never far from help. We have service centers across the U.S., and each is staffed with trained technicians who can be there quickly and maintain a long-term relationship so you know who you're working with.



### TRUSTED WHEN IT MATTERS MOST









# MOTOROLA GIVES AGENCIES OF EVERY SIZE THE OPPORTUNITY TO BENEFIT FROM INNOVATIVE PUBLIC SAFETY SOLUTIONS TRUSTED BY FIRST RESPONDERS FOR MORE THAN 75 YEARS

At the heart of every mission is the ability to communicate in an instant to coordinate response and protect lives. Come with us as we lead the way to the next generation of public safety solutions. Start with the world's most widely-deployed P25 voice and data platform. Build on it in the future with broadband connectivity, rich-media applications, and collaborative devices that carry crucial voice, data and video into the field and into the hands of first responders.

Vital information that's simply at their fingertips when and where they need it. Technology that's Second Nature<sup>™</sup>. To learn about the next generation of public safety solutions visit **www.motorola.com/caribbean/astro**.

For more information on how your organization can gain the benefits of an ASTRO 25 solution that fits your needs and your budget today, please visit **www.motorola.com/caribbean/astro** or give your Motorola representative a call.