MOTOROLA
LEX 700
MISSION CRITICAL
HANDHELD

ONE THING CONNECTS EVERY FIRST RESPONDER. **IT'S THE STREET.** IT'S WHERE THE UNEXPECTED HAPPENS DAILY. AND FIRST RESPONDERS NEED TO BE READY.

STREET READY DATA

LEX 700 MISSION CRITICAL HANDHELD

Criminals are getting more sophisticated and more dangerous. Whether it's transnational syndicates forging driver's licenses offshore or teenage gangs coordinating large-scale flash mobs on their smartphones, technology has provided lawbreakers new ways to plan, execute and synchronize their actions. To meet this new threat on the street, law enforcement officers need powerful new tools of their own.

LIFE SAVING APPLICATIONS

The Motorola LEX 700 Mission Critical Handheld lets you respond with the intelligence of the entire team at your back. With a rugged, form factor and a quick-response interface, it gives you always-on public safety applications that help you see what's in front, what's behind and what's next. It's the one solution with government-grade security and easy deployment and management. And the one solution that makes you ready for almost anything.

A NEW STANDARD OF INTELLIGENCE
A NEW LEVEL OF SAFETY

A ship captain has his first officer. A fighter pilot has her navigator. In a hostile environment, both make sure that someone is gathering and synthesizing crucial information, allowing the person they are helping to focus on the primary task, and ensuring that he accomplishes his mission and stays safe. Likewise, with the LEX 700 Mission Critical Handheld a first responder has a virtual partner at his side, helping him monitor the environment, gather information and be more aware. When engaged in an incident response or alerted to a threat, the device springs to action, bringing focus to the most relevant, possibly life-saving information.

CRITICAL INFORMATION IN THE FIELD

Take full advantage of media-intense applications with 4G speed, ensure responders are never out of touch with 3G and Wi-Fi™

A Public Safety LTE connection is like a network wall plug — but one that goes wherever field personnel go. IT managers and field officers no longer need to think about what information should be made available in the field since all the department's information can be brought to the field, on demand. Tactical maps, mug shots and live video from a bank robbery in progress can be sent to the nearby street corner at the same time it reaches the command center. At the same time, field information is immediately available to headquarters: unit positions, officer status, crime scene images and evidence chain of custody. Groups can form, collaborate and tackle a problem in minutes — even when they are miles from each other. Rich information and collaboration lead to quick, correct responses, allowing your personnel to easily keep up with quick-thinking lawbreakers and rapidly escalating incidents.

Other wireless technologies help round out these capabilities. Wi-Fi and 3G cellular support let you leverage prior infrastructure investments and provide nationwide coverage. Bluetooth technology lets you connect peripherals like cameras, fingerprint readers, printers — or a radio.

WHEN IT NEEDS TO BE SEEN

Get a shared operational view of an incident with high-quality streaming video, hardware-accelerated 3D graphics and a ultra-bright display that you can see in direct sunlight

In military circles, it's known as the OODA Loop: Observe, Orient, Decide and Act. In conflict — whether against an invading army, an organized crime operation or a lone hostage taker — the ability to execute this loop faster than your adversary is crucial.

LTE broadband and video software allow officers to see the live incident video or background footage before they arrive, so they know what to expect and can more quickly orient themselves to the situation. The high-resolution, ultra-bright display helps ensure that important details don't get missed, and that the officer doesn't get distracted or frustrated with poor-quality video. As the incident unfolds, the LEX 700's broadband capabilities let video and data stream out to colleagues and commanders, keeping them in the loop without distracting those on the scene.

ALWAYS HAVE THE BATTLE MAP

Give personnel up-to-the-minute location information with GPS tracking capabilities and advanced software

One of the most challenging tasks for even the most well-trained response team is keeping track of friend and foe as an incident unfolds. This task is even more difficult for commanders and those not directly at the scene, as they have to rely on voice communications and secondhand descriptions, while making split-second tactical decisions.

The hardware and software capabilities of the LEX 700 make it much easier for everyone to know what's happening. Tracking information from mobile CAD and real-time collaboration software lets everyone see the positions of all field assets and know precisely where they and all their teammates will need to be next. The handheld unit's GPS, high-resolution display and broadband capabilities allow all of this information to be shared in real time, giving everyone a detailed, up-to-date and readily understandable operational view.

FORGET THE PAPERWORK

Handle everyday tasks like ticket writing, identity verification, evidence tagging – even booking a suspect – in seconds, right at the scene

Every officer knows the routine. It's near the end of the shift, and he must return to the station to deal with paper. Ticket books, incident reports, mileage log sheets, arrest follow-up paperwork, citizen contact reports, evidence logs – it can take hours. But it doesn't have to be that way.

The LEX 700 Mission Critical Handheld supports a wide variety of proven solutions for officer efficiency. Report writing software lets an officer automatically fill out a traffic ticket, while evidence management logs evidence and starts a chain of custody right at the scene. Identity management not only informs the officer if a suspect has a record, but let's him create one on the spot.

The LEX 700 transmits this information directly to headquarters so there's no need to file papers at the station.

RICH APPLICATION ECOSYSTEM

Easily leverage existing and new Android-based applications for a complete solution to your most complex problems

Using the Android™ operating system, the LEX 700 provides agencies with a flexible platform to add multi-media rich applications to enhance efficiency and productivity during everyday activities and critical events.

Now you can have the best of both worlds: a ruggedized handheld device built specifically for public safety, and public safety applications that agencies use everyday.

EXCEPTIONAL CONNECTIVITY

Whether it is data, photos, video or voice, the LEX 700 Mission Critical Handheld brings it to you quickly, reliably and securely.

It starts with support for Band 14 LTE – the wireless broadband network for public safety, created from the ground up to give government organizations greater throughput, security, coverage and control of their data. The LEX 700 will support standards-based Public Safety LTE 700 MHz Band Class 14 networks, so even if two jurisdictions use networks from different vendors, the device can be configured to work on both networks.

The LEX 700 can also connect to other networks, including Wi-Fi and carrier 3G and 2G networks. Not only does this allow agencies to rationalize rollout plans and leverage existing infrastructure – it also lets them have nationwide coverage from day one.

The LEX 700 Mission Critical Handheld brings virtually unlimited connectivity options to the field:

- Band 14 Public Safety LTE
- 3G EVDO Rev. A
- CDMA 2.5G and 2G cellular
- 802.11 a/b/g/n Wi-Fi
- Bluetooth® technology

A WORTHY PARTNER
FOR YOUR RADIO

The LEX 700 Mission Critical Handheld and your P25 radio provide responders with rugged devices that deliver reliable communications and convenient operation when they need it the most.

Together, these two devices will provide public safety agencies with the advanced voice and data tools to help responders be ready for what's next.

LEX 700

APX™ 7000

CONNECT IN AN INSTANT

Communicate using voice with a dedicated Push-to-Talk button. Improve your response with P25 interoperability and get help fast with the Quick Action button. And know that your voice will be heard with advanced noise-canceling technology.

No one knows better than Motorola that there are times when there is just no substitute for voice. That's why we designed the LEX 700 to provide multiple voice communications options, from a simple phone call to accessing your P25 radio network.

The LEX 700 allows an officer to make phone calls via a carrier cellular network. A plainclothes detective can call an informant, double check photos in a case file and hear a high-priority radio call from the captain – without reaching for his radio. In an emergency, the detective can immediately call for help over the phone, connect directly with the dedicated Push-to-Talk button, or notify a dispatcher and the command staff that he needs assistance via the Quick Action button. No matter what the reason or carrier, the caller's voice gets through, even in the middle of the incident, thanks to advanced noise-canceling technology. Public safety officers expect no less from Motorola.

LETTING YOUR VOICE BE HEARD

Public Safety agencies rely on voice communications, and the LEX 700 Mission Critical Handheld brings a multitude of voice technologies to the field, in one rugged package.

Push-to-Talk allows officers to contact a colleague's handheld device and quickly check or verify critical information about the incident at hand.

But that's not all. A LEX 700 user can also talk to a colleague on a P25 radio through an LTE-P25 network gateway. This lets a commander at headquarters contact staff in the field without having to walk to the dispatcher's console, an undercover officer keep his radio discreetly hidden, or a SWAT team member planning a hostage rescue to contact his colleagues without switching devices.

Nor did we forget making phone calls: LEX 700 connections to cellular telephone networks let responders call civilians, informants and others without having to carry a separate device.

LEX 700 Mission Critical Handheld industry-leading voice features include:

- ASTRO® 25 radio network connectivity via LTE-P25 gateway
- Support for phone calls over cellular networks
- Dual-microphone noise cancelling technology
- Dedicated Push-to-Talk button

AN INTEGRATED
MISSION CRITICAL ARCHITECTURE

Safer cities create thriving communities. Places where people want to live and businesses want to operate. To make this possible, you need a strong mission critical foundation, a future-ready platform. The Motorola VALR™ Mission Critical Architecture allows public safety professionals to transition between radio and broadband networks, both private and public. It unifies data sources and services that enable next generation mobile applications, and dynamically prioritizes the information that matters most to the people who need it most. And it is built on a flexible, migratable open platform that's simple to manage.

Our VALR Architecture operationalizes the data that surrounds you, turning information into actionable intelligence. And the LEX 700 lets you share that intelligence with those that need it, when they need it most.

UNIFIED DATA

The VALR Architecture brings together information like location, tracking, presence and video from disparate data sources. It transforms this data into intelligence and delivers a single, real-time view of every situation for better collaborative actions. With their LEX 700 handheld devices and all their applications in sync, responders on foot get the same information at the same time as those in vehicles or back at headquarters, and can collaborate in real time.

DYNAMIC INTELLIGENCE

Getting the right information at the right time is more important than ever – yet is more difficult as the number of networks and devices available grow. Our VALR Architecture uses information about responders' environment, incident and personal context to prioritize network resources and optimize delivery to devices like the LEX 700 handheld or an in-vehicle workstation. When your personnel see only the most relevant information, they can make better decisions and faster actions.

MISSION CRITICAL PERFORMANCE

No matter where they are or where they're going, first responders need a continuous connection to critical voice and data communications. The VALR Architecture lets responders using LEX 700 handhelds leverage private 4G broadband networks and carrier 3G networks. And end-to-end, concentric rings of protection keep your sensitive data secure, even when users transition between networks.

SHARE ACTIONABLE INFORMATION AND
TRANSFORM THE WAY YOU RESPOND

SECURE YOUR INFORMATION

Secure your sensitive data, even when a device is lost or a user roams across private and public networks

With several built-in safeguards, the LEX 700 Mission Critical Handheld helps to keep your communications secure. It is FIPS 140-2 compliant and designed to ensure that sensitive information stays safe when a user transitions across private and public networks. Device management software can let you quarantine or remotely wipe a device that has been lost or stolen, preventing unauthorized access.

STAY IN CONTROL

Retain full control over user accounts and manage devices in the field.

We know that a large-scale deployment of portable devices will pose challenges for IT staff. Software and services can help agencies deal with user accounts, deploy and update devices in the field, control profiles and policies associated with each device — even wipe a device that has been lost or stolen.
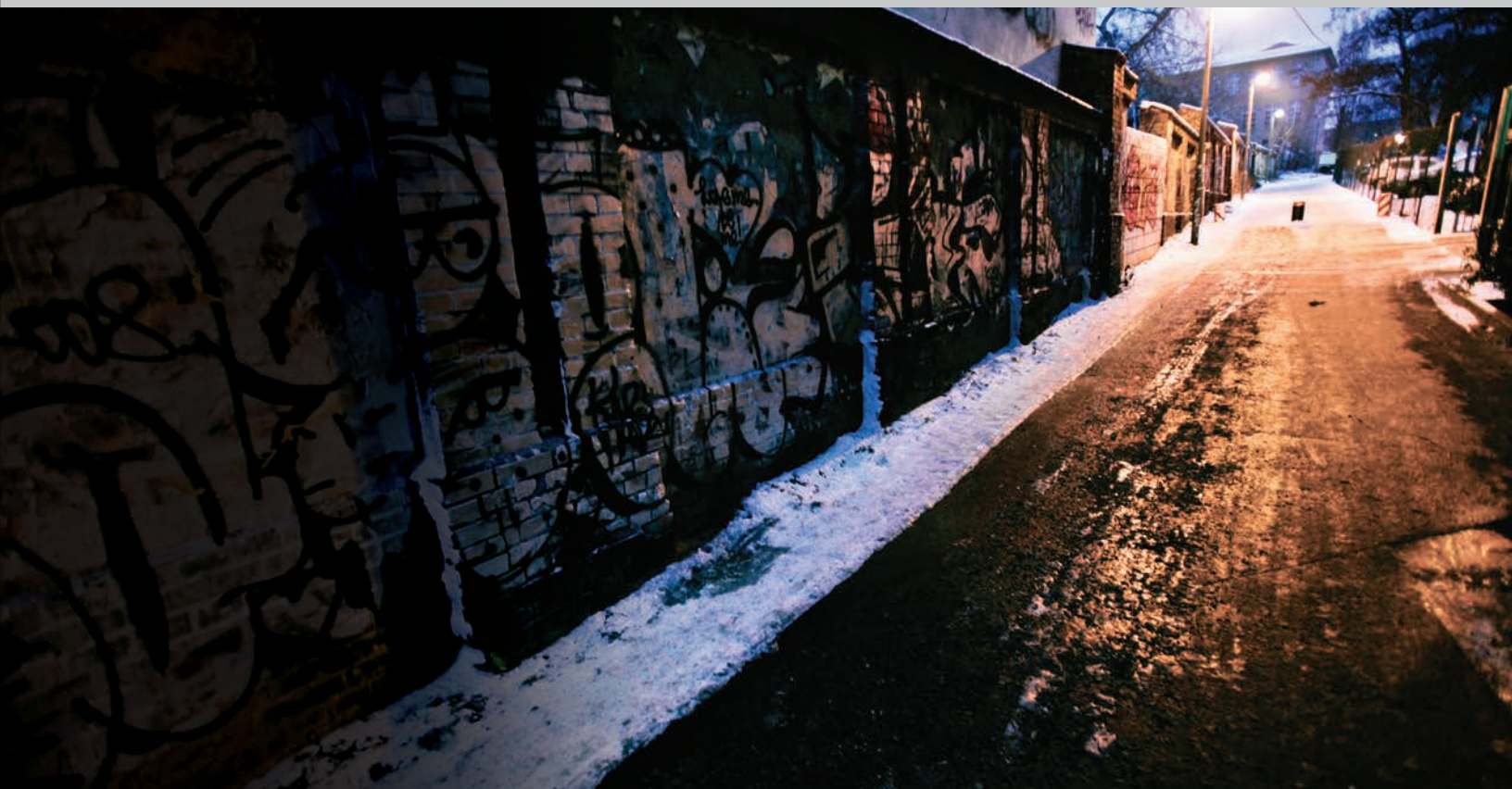
Everything from battery health to patch management to application lockdown is available to the IT department. Support staff can also remotely control a field device, which significantly lowers support costs and allows field personnel to stay focused on the mission and remain where they are needed most.

SET PRIORITIES

When an incident happens, ensure that information reaches those who need it most first

Your personnel don't get to choose where an incident takes place. It can happen at the edge of town, in a parking garage or in an area surrounded by tall buildings. Responders with the LEX 700 will know that the information they need will get through, thanks to your Public Safety LTE private network's ability to prioritize based on the user and the situation.

The LEX 700 enables this capability by keeping track of its user's identity, role and status. This lets the network determine the priority on a real-time basis — so when routine patrol gives way to an emergency, bandwidth allocation changes in response.

BUILT FOR THE STREET
MISSION CRITICAL DESIGN

The LEX 700 Mission Critical Handheld was designed by Motorola to address the unique requirements of public safety personnel. Whether it is law enforcement, fire, EMS or others on the front line, they require tools that deliver the voice and data needed in the field. But that's only the beginning. The tools must also withstand the challenges of working outdoors, in rough conditions 365 days a year – and operate in a way that lets personnel focus on the task at hand, not the technology.

HIGH VELOCITY HUMAN FACTORS – THE DNA OF MOTOROLA DESIGN

Our user-centered device design process delivers purpose-built technology that integrates the rigors of social science with the art of design. We pioneered a field of study that focuses on human performance in periods of extreme stress, volatility and uncertainty. It's called High Velocity Human Factors. Research reveals that under high stress, people process information very differently. We transferred this research into our device portfolio: integrating ergonomics, cognitive and clinical psychology, as well as physical and cultural anthropology.

The result is an LTE device intuitively designed for emergency response. It presents critical information front and center for improved decision making and to help ensure that the most critical functions are always accessible. And features, like a dedicated Push-to-Talk button, are designed to help your personnel stay safe in high-stress situations.

SOFTWARE THAT ADAPTS TO THE SITUATION

The LEX 700 software complement was developed for continuous use in the often hostile environments where public safety conducts its operations. For example, an officer en route to an incident receives directions and status of approaching backup units, while a deputy at a traffic stop does a drivers license lookup and is warned if the car pulled over belongs to a known felon.

When a video feed is needed, the Real-Time Video Intelligence application allows personnel to see the highest-quality video available, from fixed, mobile and wearable cameras. Live video is delivered in real time, with no buffering delays, even in challenging and ever-changing network conditions.

The LEX 700 Mission Critical Handheld will deliver the most complete, integrated computing experience available to public safety personnel, including many of these applications:

- Query and messaging
- Report writing
- Identity management
- Mapping and navigation

- Email and Web
- Real-time video streaming
- Incident response team collaboration

- Asset tracking and management
- Data capture

HARDWARE THAT PERFORMS IN A CRISIS

During an incident, every second counts. To keep up with the mission critical needs of public safety, the LEX 700 Mission Critical Handheld incorporates powerful hardware components; we included a dual-core 1 GHz processor for fast operation and task execution, and because it's so important to have a clear view in all three dimensions, we built in a dedicated graphics processing unit (GPU) with 3D rendering support.
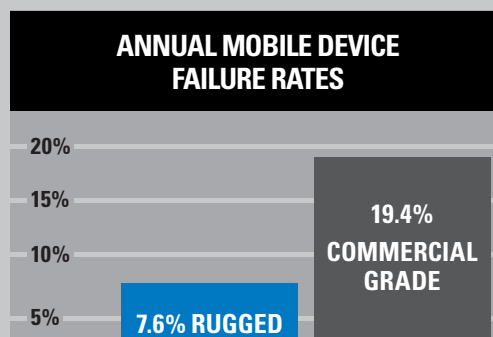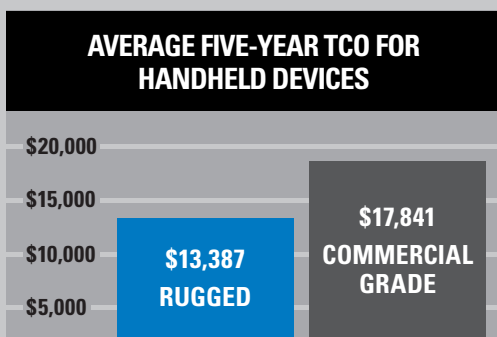
Whether it's the 4-inch, high-resolution, capacitive touch screen for easily readable maps, blueprints and vibrant video; noise-canceling technology for clear audio from the incident scene; or an 8 megapixel camera capable of recording DVD-quality video, everything in this handheld works to provide capabilities unheard of in the field only a few years ago.

The LEX 700 Mission Critical Handheld hardware includes:

- Advanced 1 GHz dual-core processor
- Android operating system
- Hardware-accelerated 3D graphics
- High-resolution, 4-inch display with capacitive touch screen
- 8 megapixel camera
- Video recording up to 720P
- Dedicated Push-to-Talk button
- Quick Action button
- Bluetooth®
- Built-in GPS

RUGGED FOR MISSION CRITICAL OPERATIONS

Working in public safety means operating outdoors, often in hostile weather conditions. That's why the LEX 700 is IP54 sealed and ruggedized against everyday hazards like drops, moisture, vibration and temperature extremes, and matched with a long-lasting battery. It's all geared toward giving public safety a device they can count on — in the office, or in a crisis.

AVERAGE FIVE-YEAR TCO FOR HANDHELD DEVICES

- $20,000
- $15,000
- $10,000
- $5,000

$13,387 RUGGED

$17,841 COMMERCIAL GRADE

ANNUAL MOBILE DEVICE FAILURE RATES

- 20%
- 15%
- 10%
- 5%

7.6% RUGGED

19.4% COMMERCIAL GRADE

Source: VDC Research, 2010

THE ART OF MISSION CRITICAL DESIGN

The LEX 700 Mission Critical Handheld delivers an exceptional combination of rugged hardware, powerful software and broadband connectivity.

FEATURES

Proximity Sensor

On/Off Power Button

Ambient Light Sensor

Dedicated PTT Button

4.0 in Display, Damage-resistant Capacitive Touch Screen

Volume Buttons

1.0 GHz Dual-Core CPU
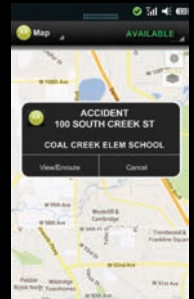
Ruggedized Construction

3.5 mm Headphone Jack
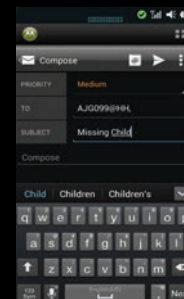
Locating Channels for Secure Docking

Front-Facing Speaker

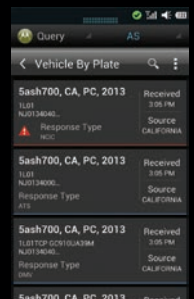Primary Microphone for Noise Reduction Technology

Incident Monitoring

Mapping

Messaging

Query

Real-Time Video Intelligence

Amber Alert

High-Output LED Flash

8 Megapixel Camera

Rugged Accessory Port

Bluetooth® Technology

Micro USB Port

Grip Texture

Dedicated Camera Button

Battery Release

4-Slot Device
Charging Cradle
(Rack Mounted)

Secondary Microphone for
Noise Reduction Technology

Indicator Lights

Quick Action Button

ACCESSORIES

- 4-Slot Device Charging Cradle
- 4-Slot Spare Battery Charger
- Impact-Rated Vehicle Cradle
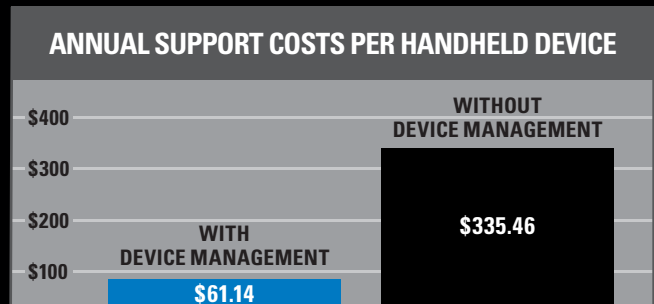- Desktop Charging Cradle
- Quick-Access Leather Holster

BEHIND EVERY STEP
THE POWER OF MOTOROLA

With many years of experience with large-scale device deployments in the field, and a decades-long legacy of serving public safety, Motorola will help you ensure a smooth deployment and safeguard your personnel, data and infrastructure.

MOBILITY LIFECYCLE MANAGEMENT

Rolling out a device like the LEX 700 Mission Critical Handheld is always a challenge for Information Technology personnel. Supporting such a deployment creates a lot of questions: Who will handle the initial setup? How will it get software updates or fixes in the field? What if an officer needs help using the device? And what if the device gets lost? What kind of sensitive information might be lost with it?

Motorola has deployed tens of thousands of devices for organizations both large and small, in enterprise and government. Whether you have a few devices out there or a few thousand, we offer a complete lifecycle approach to help ensure you realize the greatest value from your device investment. Our solutions are comprehensive in scope and scalable to the unique needs of your organization.

ANNUAL SUPPORT COSTS PER HANDHELD DEVICE

$400	
$300	**WITHOUT DEVICE MANAGEMENT**
$200	$335.46
$100	**WITH DEVICE MANAGEMENT**
	$61.14

Source: VDC Research, 2010

SIM CARD PROVISIONING

As your agency deploys hundreds, perhaps thousands of LTE devices, how will you manage individual network access and identification? Will turning into your own cellular network provider overwhelm your IT resources?

Not if you turn to Motorola for help. We will provide you with a single point of control for all your device provisioning needs. We will help you collect customer information and match it to a Subscriber Identity Module (SIM card), setting appropriate access rights and Quality of Service (QoS) parameters. We will even generate and customize these SIM cards with your agency's information and logo, letting you focus on what's important: putting new tools into the hands of your personnel.

SECURITY AND RESILIENCY

Whether it's organized criminal enterprises or agenda-driven "hacktivists," public safety information systems have become the target of increasingly sophisticated attacks. The goal of these groups is to obtain sensitive information, make it difficult for public safety organizations to communicate and compromise first responder safety.

Securing data devices and back-end systems against such threats is vital. Motorola's Security Services team consists of experts who will help you identify potential security problems and resolve them before they can be exploited. Motorola will not only conduct security audits and penetration tests on your network – we will also help you create a response and recovery plan, so that you are prepared for the unexpected.

VIDEO SOLUTIONS INTEGRATION

The LEX 700 Mission Critical Handheld helps you bring real-time streaming video to the field, where it is needed most. But where will this video come from? Who will deploy and support the fixed and mobile cameras required to make it work? How can you make sure that it is useful and admissible in court?

Motorola has more than a decade of research and development experience in public safety video. Not only can we manufacture and help deploy a customized video solution that supports a few – or a few thousand – fixed and mobile cameras, but we can also be with you at every step of the project, from initial concept to site walks, through equipment selection, and even writing policies and procedures for your video system. All are focused on one goal: to get your field personnel the full operational picture, right when they need it.

STREET READY DATA

MOTOROLA LEX 700 MISSION CRITICAL HANDHELD

SEE DANGERS

PROTECT MORE

REACT FASTER

COUNTERACT STRONGER

SEE MORE AT ONCE

MOTOROLA
LEX 700
MISSION CRITICAL HANDHELD

MOTOROLA