



**MOTOROLA SOLUTIONS**



**EVERY DEVICE. EVERY NETWORK. EVERY TEAM. CONNECTED LIKE NEVER BEFORE.**

# WAVE™ 5000

WAVE 5000 enables scalable, enterprise-grade push-to-talk (PTT) on broadband networks and devices so that critical, time-sensitive information flows quickly and securely between mobile workers, teams and citizens.

WAVE provides a communications interoperability platform for push-to-talk between all your devices and networks. Whether on a smartphone, radio, computer, landline or any other communications device, your personnel can connect instantly and securely.

## THE RIGHT DEVICE FOR THE JOB

Perhaps you're an executive traveling for a conference but you want to stay connected to your radio system.

Or you use your radio for operational purposes do not need to carry a ruggedized radio with you all of the time. Maybe you're a government agent working undercover. Your smartphone and earbuds would be ideal to connect to other tactical units while keeping you inconspicuous.

For every police officer on the beat, agent on a job or worker on shift, there are many other supporting personnel that can provide support, often life-saving assistance, with PTT communications using smartphones, tablets or PCs from any location. WAVE 5000 makes it possible.

## BRIDGING TWO-WAY RADIO WITH BROADBAND NETWORKS

With WAVE 5000 you can experience functionality that lets you build and operate secure, highly-scalable solutions for today's most demanding communications environments:

### Connect Radio to Radio

Connect multiple, disparate two-way radio systems and remove barriers to communication interoperability and workforce collaboration.

### Extend Radio To Broadband

Extend workforce communications beyond radio to include smart devices and broadband networks for seamless communications in any location.

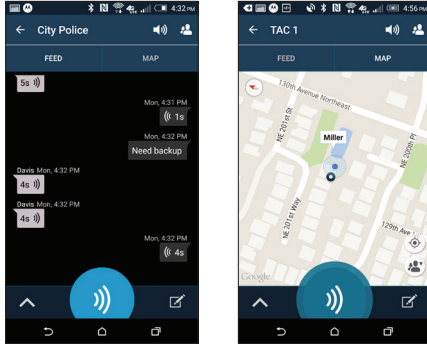
### Embrace Broadband PTT

Secure, 'over-the-top' PTT connecting smart devices over 3/4G LTE and Wi-Fi networks delivers greater choice and flexibility when choosing a non-radio, carrier-independent communications solution.

## WAVE 5000 CLIENT APPLICATIONS

Whatever the device or available network, WAVE has client applications that meet the needs of all types of users.

### MOBILE COMMUNICATOR

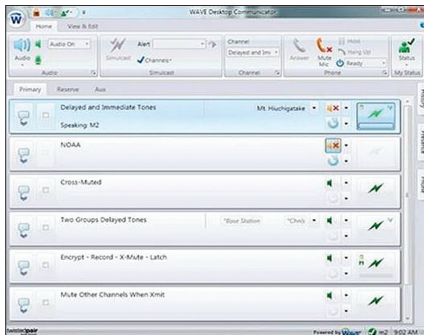


#### Turn Your Apple or Android Device into a Multi-Channel PTT Handset

Not everyone needs or wants to carry a radio handset. But they do want instant, secure access to important, often mission-critical communications wherever they are located.

With a WAVE Mobile Communicator installed on a smartphone, tablet or custom handheld, any user can access PTT communications from any location, talking with groups of other users or individuals as required. Mapping, presence and channel activity monitoring improve situational awareness for everyone.

### DESKTOP COMMUNICATOR

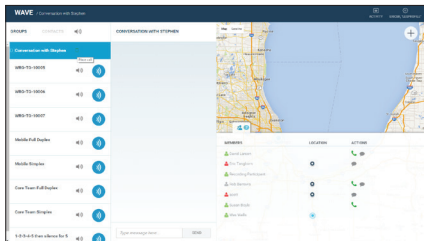


#### Access PTT Communications from Your Desktop PC

You're not a mobile worker in the field responding to events and service calls, but you're there to provide support from headquarters, a communications center or a remote location. Let's turn your desktop PC into a PTT communications hub.

WAVE Desktop Communicator is a software application that allows workers to use their desktop or laptop PC to monitor, transmit, and receive audio from multiple communication systems such as two-way radio networks and telephones. With an intuitive and easy-to-use display, the Desktop Communicator runs on virtually any PC, from multiprocessor desktop machines to netbooks.

### WEB COMMUNICATOR



#### Use a Web Browser to Access Your WAVE Communications Channels

You're a computer-based worker who would like to stay connected to your team from anywhere. WAVE Web Communicator provides device agnostic communications from your web browser.

Simply log in for secure access to your PTT groups and a rich feature set including private calls, group text messaging, history, mapping and more.

### ADVANCED DESKTOP COMMUNICATOR



#### Scalable Dispatch Console

Designed for small to mid-sized organizations, the WAVE Advanced Desktop Communicator is an enterprise-grade dispatch console.

Advanced Desktop Communicator provides advanced VoIP dispatch features that give individual dispatchers the ability to display and manage hundreds of communications channels that make up a complex and fluid communications environment. Multiple radio channels, telephone calls and other communications systems can be quickly patched together. Activity displays, audio recording and instant replay give dispatchers a complete session history for archiving and audit trail purposes.



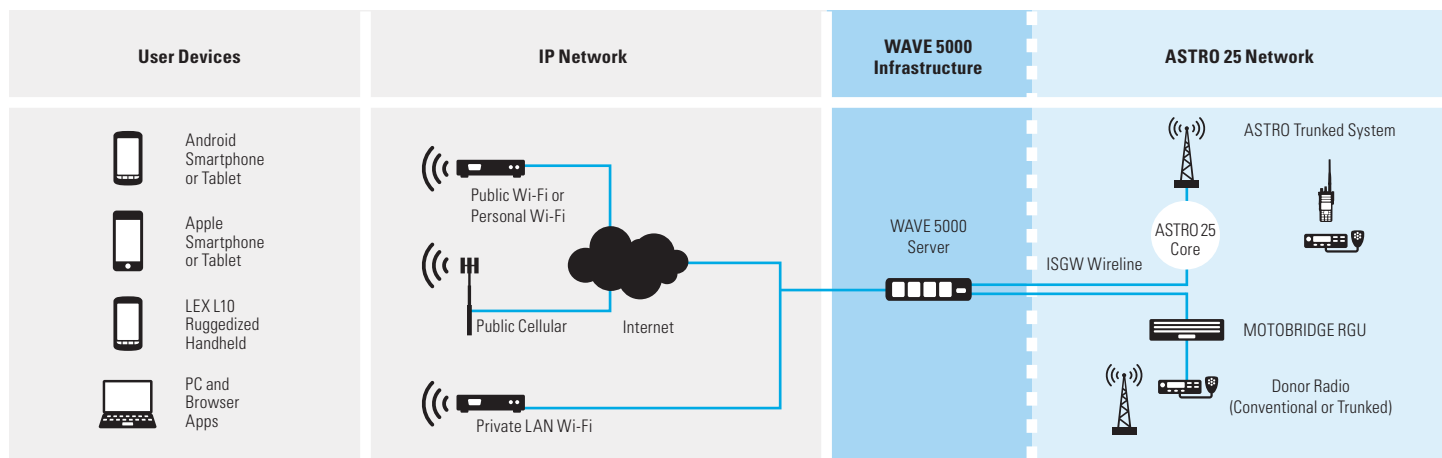
# WAVE FOR ASTRO<sup>®</sup> 25

If you're one of the over two million users that rely on a Motorola Solutions P25 radio for daily communications as well as emergency response in the most demanding situations, you value the importance of staying connected with fellow first responders and supporting teams when it matters most.

And like the majority of your industry peers, you will have noted the almost universal availability of broadband data networks and smart mobile devices and are asking how they can be used to improve public safety communications for everyone.

The answer lies with WAVE 5000 and its ability to add another performance-driven layer of capability to ASTRO 25 systems by securely extending PTT communications to non-radio users over broadband networks, from any location.

## WAVE 5000 INTERFACE INTO ASTRO 25



## WIRELINE INTEGRATION PROVIDES INCREASED FLEXIBILITY AND SCALABILITY

Traditional wireless radio network integration uses a donor radio to provide a link between the core LMR system and the radio gateway. This set up requires a new donor radio for each talkgroup, adding cost and complexity. WAVE's wireline ASTRO 25 integration means that you can easily add and remove talkgroups simply through software configuration, which translates to less hardware and maintenance costs. In addition to talkgroup audio being passed between the LMR and broadband networks, the wireline interface opens up the possibility for sending and receiving UnitID information and more.

## ASTRO 25 ENCRYPTED TALKGROUP INTEROPERABILITY WITH WAVE

WAVE 5000 supports ASTRO 25 encrypted talkgroups to WAVE using the ISGW wireline solution with encryption keys securely stored in the WAVE CRYPTR device. With WAVE encrypted talkgroups, your mission-critical PTT communications stay secure from the radio core to the broadband edge.

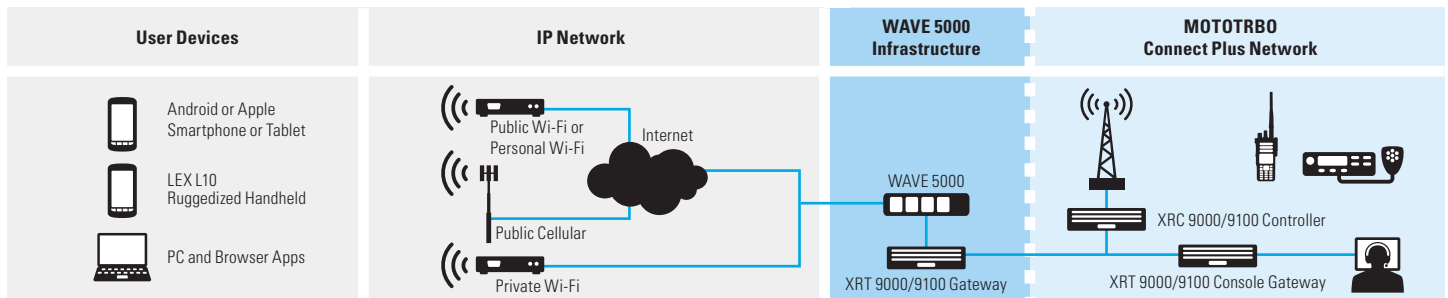
# WAVE FOR MOTOTRBO™



WAVE 5000 uses a wireline interface to integrate with a MOTOTRBO Connect Plus, Capacity Plus and Capacity Max radio systems. The WAVE 5000 Server manages all communications between MOTOTRBO systems and broadband networks and devices, and maintains user credentials and configuration information for smartphone clients.

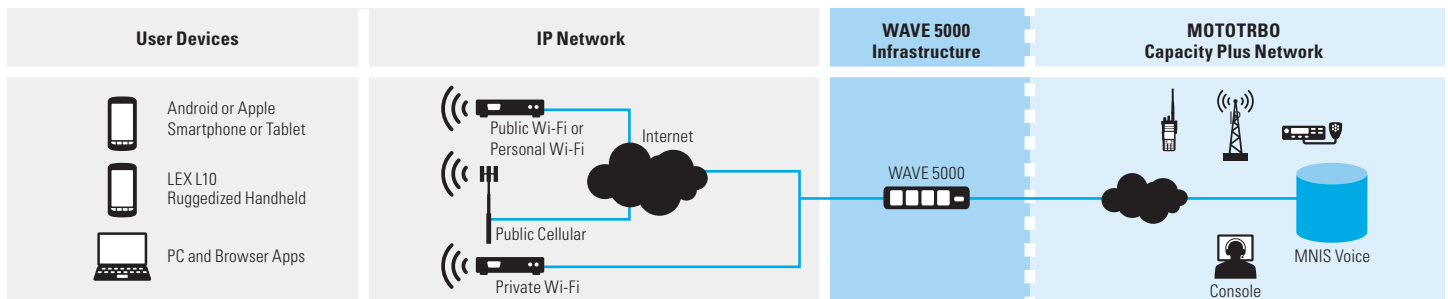
## EXTENDING A MOTOTRBO CONNECT PLUS SYSTEM

For MOTOTRBO Connect Plus systems, the WAVE 5000 Server integrates directly with an XRT 9000 or XRT 9100 Connect Plus Gateway. This interface provides an IP-based wireline connection to your Connect Plus system for a highly-scalable, reliable and secure broadband PTT integration.



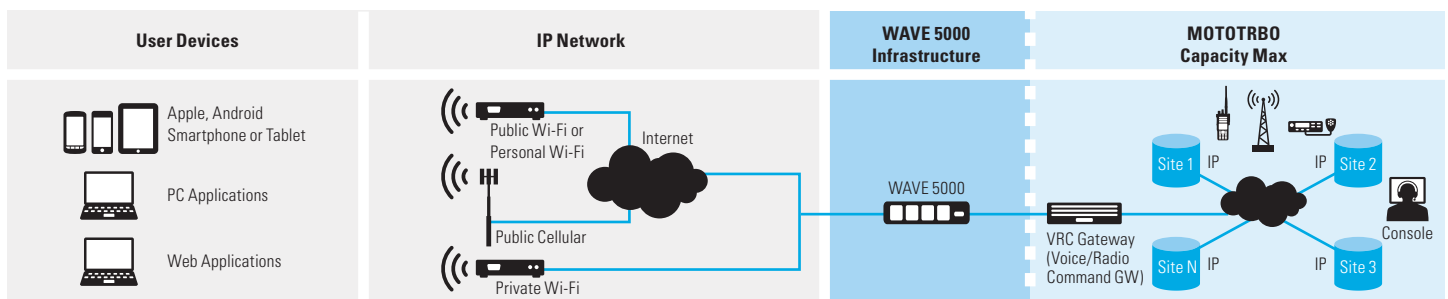
## EXTENDING A MOTOTRBO CAPACITY PLUS SYSTEM (SINGLE SITE / MULTISITE)

For MOTOTRBO Capacity Plus systems there is no requirement for an XRT gateway or donor radios as the WAVE 5000 Server integrates directly with the system using the IP-based MNIS voice interface. Repeaters that need connectivity to WAVE should have NAI voice licenses enabled.



## EXTENDING A MOTOTRBO CAPACITY MAX SYSTEM

For MOTOTRBO Capacity Max systems, the WAVE 5000 Server integrates directly using a MNIS VRC Gateway. No XRT or donor radios are needed. One VRC Gateway Talkpath license is required for each simultaneous call through to the WAVE server. These licenses are loaded on the CMSS.







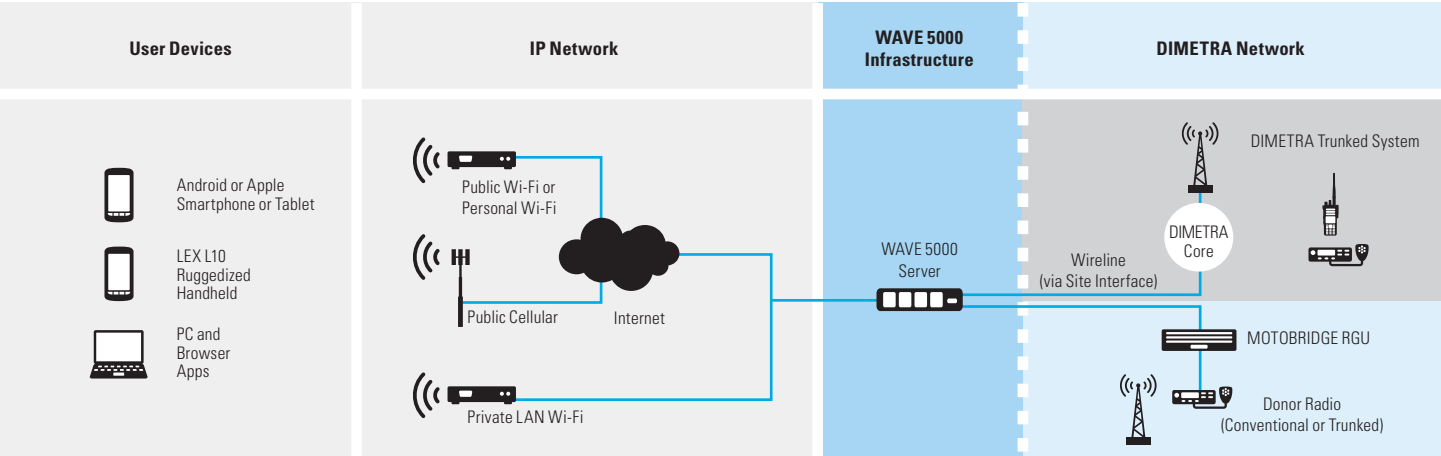
# WAVE FOR DIMETRA™

Motorola Solutions DIMETRA solution offers secure, reliable and efficient communications customized to meet the needs of different markets. With a large installed base and multiple vendor support, we offer a wide choice of products and applications so organizations can select exactly the right solution for their needs.

WAVE 5000 continues this system flexibility by enabling secure and scalable extension of DIMETRA networks to fixed and mobile broadband users and devices, enhancing team collaboration and effectiveness.

WAVE 5000 includes a wireline interface to DIMETRA networks, enabling greater system scalability and performance. WAVE 5000’s wireline interface supports up to 39 simultaneous DIMETRA to WAVE calls and the ability to provision up to 300 different DIMETRA talkgroups to interoperate with WAVE.

## WAVE 5000 INTERFACE INTO DIMETRA



## DIMETRA ENCRYPTED TALKGROUP INTEROPERABILITY WITH WAVE

WAVE 5000 supports DIMETRA encrypted talkgroups to WAVE using a DIMETRA site interface wireline solution with the DIMETRA encryption keys securely stored in the WAVE CRYPTR device. With WAVE encrypted talkgroups, your mission-critical PTT communications stay secure from the radio core to the broadband edge.

## WAVE 5000 INTERFACE INTO NON-MOTOROLA SOLUTIONS RADIO SYSTEMS

Not every radio system comes from Motorola Solutions, and many public sector and commercial organizations may operate one or more radio systems across their global operations. With WAVE 5000 these organizations can still enjoy the many communication and collaboration benefits from the secure extension of radio PTT communications to non-radio users over broadband networks.

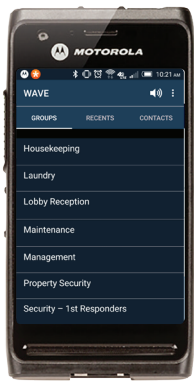
Talkgroup extensions from a non-Motorola Solutions system to non-radio users requires a donor radio with an appropriate radio gateway radio to enable the necessary audio streams to interface with the WAVE server.

## TELEPHONY INTEGRATION

Extend your PTT communications and provide greater device choice to users by integrating telephony with WAVE's interoperable push-to-talk platform. WAVE can connect to IP-based telephony systems via IP PBX's from leading vendors such as Cisco and Avaya. WAVE supports H.323 and SIP protocols. With telephony integration, users can easily communicate on any WAVE channels via phones. For example, telephony integration into the Advanced Desktop Communicator can provide the benefit of a dynamic patch of a telephone call directly to a WAVE talkgroup or individual WAVE user.

## FLEXIBLE DEPLOYMENT OPTIONS

Deploy WAVE on premise or in the cloud to best suit the needs of your organization.



### USE THE WAVE MOBILE COMMUNICATOR WITH THE LEX L10 MISSION CRITICAL LTE HANDHELD

The LEX L10 Mission Critical Handheld from Motorola Solutions redefines the broadband experience in the field. Created specifically for the demands of public safety, this device ensures optimal coverage on both Verizon 3G/4G commercial and Public Safety LTE networks.

The LEX L10 leverages the core mission critical features of Motorola Solutions APX radios. Designed for optimal PTT performance, the LEX L10 offers loud and clear audio, a dedicated PTT button, exceptional durability and excellent security. With an intuitive user interface and a suite of public safety applications on a sleek and rugged smartphone form factor, officers can create more opportunities to quickly collaborate and share information across agencies in daily or covert operations. The LEX L10 is also equipped with Google Mobility Services (GMS), offering the best of Google and Android to responders, via the Google Play store.

For more information about the LEX L10, please visit: [motorolasolutions.com/LEXL10](http://motorolasolutions.com/LEXL10)

For a list of PTT accessories tested to work with WAVE Mobile Communicator, please visit: [motorolasolutions.com/wave](http://motorolasolutions.com/wave)

For more information about WAVE 5000 and other WAVE Work Group Communications solutions, go to [motorolasolutions.com/WAVE](http://motorolasolutions.com/WAVE)

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