APX SmartConnect

Your P25 radio system is designed for excellent coverage, but there are times when you need to go beyond the boundaries of the network, without losing your vital connection. Now, SmartConnect from Motorola Solutions can keep you in touch with your team even when outside of radio system coverage.

How it works

When P25 is unavailable, SmartConnect automatically switches your voice channel to available broadband networks and then back again as soon as you return to P25 coverage. This effectively extends the usable service area of your radio.

APX radios can use SmartConnect when connected directly to a Wi-Fi access point or through an IP based connection that may be provided by an external device such as an in-vehicle LTE modem or and in-vehicle satellite modem.

The radio will automatically switch between LMR and Broadband operation. This switch is normally done when the radio is not active in a call to minimize any lost audio. P25 based packets are used on the broadband network so that the radios functionality and audio quality are similar to operating on the LMR network. The radio indicates SmartConnect is active by showing a blue bar on the display.
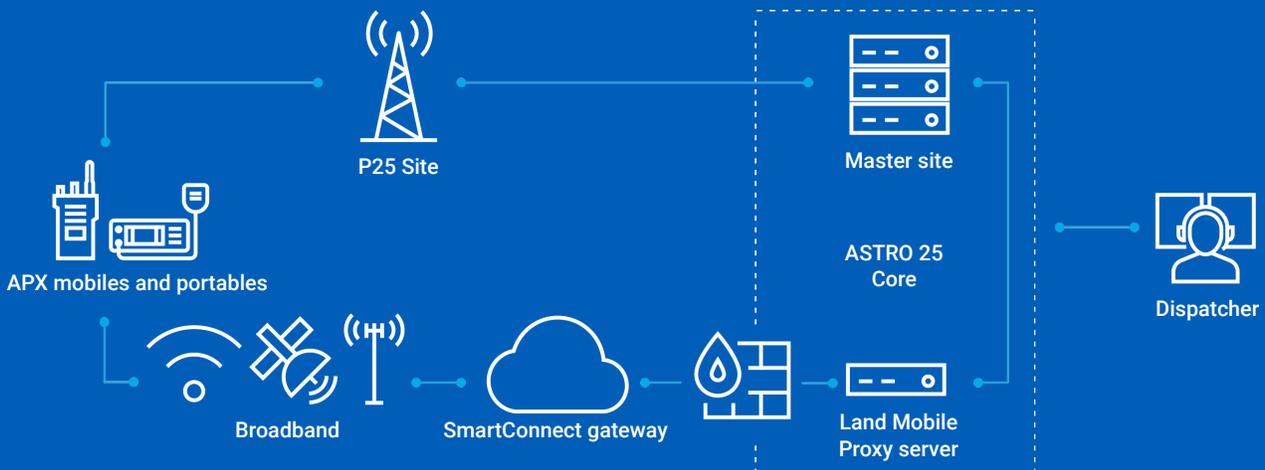
Security

Voice information is sent over the broadband network as P25 packets, complete with end-to-end encryption. Control signals between the radio and gateway are encrypted using Transport Layer Security (TLS).

Delivery

As standard, SmartConnect is purchased as a subscription service, and is charged per radio per year. Other plans are available: Please speak with your account executive.

Benefits

Users stay connected to the radio network even when they are outside radio coverage. No special actions or commands are required: switchover is automatic. There is no requirement to manage a separate set of talkgroups and configurations.

APX mobiles and portables

P25 Site

Broadband

SmartConnect gateway

Master site

ASTRO 25 Core

Land Mobile Proxy server

Dispatcher

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Sample use cases

In-building coverage

With SmartConnect, users can leverage existing Wi-Fi infrastructure to communicate from locations with limited coverage such as schools, hospitals, and malls. Stay connected wherever you have Wi-Fi service.

Remote access

When outside of your P25 network, SmartConnect allows your radio to utilize in-vehicle LTE or satellite modems to stay connected to the radio network. Go beyond the boundaries of your radio system with PTT communication through broadband connections.

Deadspot mitigation

As with any wireless network, coverage deadspots can occur in areas like built up cities, parking garages, or passing through hilly terrain. SmartConnect can leverage existing broadband connections to provide continuous coverage so you never lose touch with your team.

Mutual aid

When neighboring agencies call on you in times of need, the mission may take you beyond your P25 service area. SmartConnect helps you stay connected to home by utilizing broadband when outside your jurisdiction.

Features

- Group Call Clear/Encrypted
- PTT ID
- Home Emergency Call & Alarm
- FDMA/TDMA to/from LMR system
- Radio Interrupt/Console Takeover
- Announcement Group (MultiGroup)
- Group Regrouping
- Radio Inhibit/Uninhibit
- Dynamic Regrouping
- Call Alert
- Status Update
- Radio Authentication
- Scan/Priority Monitor
- Agency Groups
- DVRS with Talkgroup Translation
- Remote Monitor

Dependencies

- Portable radios must be Trunking and Wi-Fi capable
- Mobile radios must be Trunking, Wi-Fi, or Data Modem Tethering capable
- The radio must be operating on a system that is configured LMR preferred
- Radios must be connected to a channel that supports SmartConnect
- ASTRO® 25 Trunking System release A7.17+ with SmartConnect
- Deployment of cloud within an approved region

Compatibility

Portable radios:

- APX™ NEXT series via Wi-Fi or LTE
- APX 8000 series via Wi-Fi
- APX N70 via Wi-Fi or LTE
- APX N50 via Wi-Fi
- APX N30 via Wi-Fi
- APX 6000 enhanced series (BN) via Wi-Fi

Mobile radios:

- APX 8500 via Wi-Fi or Data Modem Tethering
- APX 6500 enhanced series (BN/CN) via Wi-Fi or Data Modem Tethering

Consolettes:

- APX All-Band Consolette

LTE routers verified:

- Motorola Solutions VML750
- Sierra Wireless AirLink® GX series
- Sierra Wireless AirLink MP70
- Sierra Wireless AirLink MG90
- Sierra Wireless AirLink XR80
- Sierra Wireless AirLink XR90

Satellite modems verified:

- Cobham 325

To learn more, visit: **motorolasolutions.com/smartconnect**

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