Private LTE Access Points and Routing for Critical Applications

The Challenge

For enterprises, municipalities, schools and other large venues, wireless connectivity over large areas has become business critical. Not only are wireless solutions needed for standard Internet access and communications, but they also support Internet of Things (IoT) sensors for data gathering and all kinds of other use cases. And while Wi-Fi has been a reliable go-to solution for many years, it also has limitations in many types of deployments.

- Difficult to provide adequate capacity and coverage across large areas, such as stadiums, arenas and airports
- Susceptible to interference from other users or networks, reducing connection quality

A Complete Solution

Commscope and Inseego have partnered to offer a complete Citizens Broadband Radio Service (CBRS) solution for mission-critical fixed and mobile use cases that require reliable wireless connections across large areas. Together, RUCKUS and Inseego offer a secure, cost-effective and highly reliable solution for a wide range of challenging indoor and outdoor applications.

- Inseego’s full-featured LTE router: Secure, reliable enterprise grade cellular hardware that is certified for use on CBRS.
- Commscope’s RUCKUS CBRS LTE: Private LTE that takes advantage of new CBRS spectrum rules and is packaged for easy deployment and management in business-critical enterprise and campus use cases.

Key Benefits

- Enables rapid deployment of LTE technology for business-critical wireless connectivity
- Provides superior reliability and QoS compared to Wi-Fi
- Secures mobile connections with enterprise-grade LTE security
- Eliminates dependency on mobile network operators for significant cost savings
- Ensures reliable LTE wireless coverage—indoors and out
**CBRS Private LTE**

With the availability of CBRS for use in private networks, enterprises, campuses, municipalities and other large venues have a strong alternative to Wi-Fi and paid LTE services for local large-area deployments. New FCC spectrum rules in the US have opened the door to widespread Private LTE deployments. Instead of having to rely on mobile network operators (MNOs) for spectrum, enterprises, organizations and venues of all sorts can easily reserve spectrum, at no charge, under the CBRS General Authorized Access rules, and deploy local private LTE networks. CBRS provides all of the advantages of LTE connections, including quality of service, reliability, coverage, mobility and security.

- Provides private LTE using dedicated, reserved spectrum for specific locations
- Relies on enterprise-class LTE infrastructure that is easy to buy, deploy and manage
- Uses LTE devices to deliver connections for mission-critical apps

CommScope and Inseego provide a comprehensive solution that simplifies setting up a private LTE network using CBRS. CommScope’s RUCKUS CBRS LTE portfolio includes everything you need to deploy a private LTE network with the simplicity and low cost of Wi-Fi.

**RUCKUS 3.5 GHZ LTE ACCESS POINTS**

The RUCKUS Q710 (indoor) and Q910 (outdoor) access points have technology designed to unlock the potential of CBRS. Both devices can aggregate up to four separate CBRS channels, delivering over 300 Mbps combined throughput to Inseego devices in high-density areas such as enterprise office buildings, college campuses, or stadiums. Inseego access points are powerful, easy to deploy and packed with advanced technology such as LTE-Advanced Carrier Aggregation, Self-Organizing Networks (SON), Self-Organizing Timing and Zero Touch Provisioning™. They are also lightweight, energy-efficient, and can be deployed with Wi-Fi-like simplicity.
RUCKUS NETWORK SERVICES

A unified cloud-based subscription service with all of the resources you need to manage and operate your LTE Network:

- Cloud-based element management system (cEMS) – Delivers Wi-Fi like simplicity and zero-touch provisioning to LTE AP management.
- Cloud-based evolved packet core (cEPC) – Provides required LTE network core functionality and subscriber management.
- Cloud-based spectrum allocation server (cSAS) – Provides spectrum access. Reservation is included and managed via the same platform.

READY FOR THESE USE CASES:

- Connected utility stations (water, electric, oil, gas)
- Electric vehicle charging stations
- Traffic / parking management
- Road monitoring
- Emergency response / public safety
- Transportation
- Construction / job site

Conclusion

CBRS is a game changer for enterprises, campuses and municipalities. It means you now have the opportunity to access a large amount of high-quality spectrum that can support high-performing networks for a very low cost. Private LTE networks

Our RUCKUS CBRS LTE portfolio, in combination with Inseego LTE routers, makes all this a reality and enables enterprises and service providers to deploy private LTE networks to ensure a high quality-of-service for business-critical applications and use cases.

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