ONECELL® In-building LTE and 5G Small Cell

Take control of your in-building cellular experience
Better in-building cellular coverage powers better user experiences

Reliable, flexible in-building cellular coverage that reaches every corner is a must-have for commercial buildings that are home to all types of organizations including businesses, government agencies, hospitals and universities. Uninterrupted coverage helps to attract and retain businesses and tenants, improves productivity for building employees, and enhances customer experience and personal safety, by making mobile communication easier and more reliable. Emerging 5G technology and growing user demands require solutions that are intelligent, easy to manage and future-ready.

ONECELL from CommScope lets enterprises and property owners take control of their in-building cellular experience. This small cell solution delivers a clear, reliable signal throughout buildings—even during intense usage surges. High-quality coverage can be extended to adjacent outdoor spaces such as courtyards and parking lots.
The benefits of ONECELL®

For enterprises and building owners

- Take control of your cellular experience—ONECELL brings clear voice signals and high-speed data throughout the premise.
- Future-ready—modular, software-based architecture simplifies migration to 5G.
- Compact footprint—a single 1U-high controller supports up to thousands of users.
- Expert partner ecosystem—CommScope’s network of qualified system integrators will specify, design, and install the system, and can even provide 24x7 monitoring and support.

For service providers, neutral hosts and system integrators

- Simple design and configuration—ONECELL’s innovative single-cell architecture simplifies RF planning. The system runs on standard Ethernet LANs and cabling.
- Multi-operator support—a single ONECELL system can support multiple frequency bands for multi-operator or neutral host services.
- Flexible management tools allow granular visibility and control needed by operators, neutral hosts, and system integrators.
- Hardware, software, and management interfaces support emerging Open RAN architectures and standards.

Preparing for 5G

Wireless service providers around the world have started to offer 5G services. Commercial buildings and enterprises must continue meeting the demand for high-performing in-building 4G/LTE while gearing up for 5G. ONECELL is a future-ready solution that supports LTE and a smooth transition to 5G. ONECELL RP5000 radio points can be converted from existing LTE bands to 5G via a software upgrade.
ONECELL® system description

CommScope’s ONECELL solution includes:

- A **baseband controller** that provides the signal source. It serves up to 1,024 simultaneous users in half of a standard 1U chassis.

- **Radio Points** that transmit and receive radio-frequency (RF) signals over the air. Edge intelligence in the radio points enables advanced features such as cell virtualization, enhanced signal quality and user location awareness for emergency services.
  - **RP5000 Series** supports up to four frequency bands simultaneously for multiple operators or multiple bands per operator. Programmable logic allows software switching between LTE and 5G.
  - **RP2000 Series** (not shown) is a compact, LTE only, single band radio point.

- **Device management system (DMS)** that automates provisioning and ongoing support for ONECELL deployments. It can automatically configure more than 100 key network and RF parameters. The system is available via software license or software as a service (SaaS).

- Standard Category 6A structured cabling such as **SYSTIMAX®** and **RUCKUS® ICX Ethernet switches** for a turnkey solution that saves time and money.
Simple, flexible system architecture

Business uses

**OFFICE BUILDINGS**

In businesses and other organizations, mobile phones have replaced most landlines, making it imperative to offer a reliable mobile experience. Businesses, tenants and visitors expect coverage throughout the premises. Dropped calls and poor signals negatively affect employee productivity and can lose tenants. An in-building cellular solution helps address these challenges, while reducing the need to provide guest Wi-Fi access.

**HOSPITALS**

Hospital buildings are notorious for spotty cellular coverage. Inside, it’s often necessary to go near windows or even outdoors for a clear signal. Strong in-building reception is a must-have for doctors, staff, caregivers, patients and family members.

**HOTELS**

Guests expect a five-star— and five-bar—experience. Dead zones cause major frustrations for guests and staff alike in daily operations. Mobile coverage must be strong and reliable throughout the property. Reliable in-building cellular coverage helps ensure they can communicate.

**RETAIL CENTERS**

Creating a positive in-store experience is a priority for retailers. Consumers expect reliable cellular service to easily access coupons and promotions while shopping and obtain product information online. Happy consumers post and share positive reviews online, helping drive future sales.
Indoor coverage has never been easier

A trusted partner that delivers it all

For over 40 years, CommScope has led the industry in helping companies of all sizes scale, build and sustain robust connections that power more efficient buildings. From office buildings, hospitals, hotels and airports to NFL stadiums, college campuses and beyond, CommScope is a leader in in-building cellular systems. We have tremendous in-house expertise and a global network of experienced solution providers.

Contact your CommScope representative or Solution Provider today to learn how your network can do more than you ever imagined. Visit commscope.com to learn more.
CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world’s most advanced networks. It is our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at commscope.com