CBRS: Maximize the opportunities, minimize the obstacles

For cable operators, wireless carriers and enterprises, CBRS is a unique opportunity. Its 150 MHz of mid-band spectrum enables a range of applications—from industrial internet of things (IIoT) and mobile capacity augmentation to fixed wireless access and private LTE or 5G networks. Leveraging the opportunity, however, depends in large part on having the right equipment.

In any wireless network, success starts with the antenna. Successful CBRS deployment requires antennas that are not only designed to support the new spectrum, but can help operators optimize performance in a variety of settings.

In urban/suburban areas, network operators are looking for antenna solutions that can maximize capacity and achieve optimal gain to balance coverage for uplink and downlink. In less dense rural markets, it’s more about improving coverage using the fewest possible radios.

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<th>CBRS applications</th>
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<td>Fixed wireless broadband</td>
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<td>Mobile capacity augmentation</td>
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CommScope base station antennas deliver flexibility and performance for any outdoor CBRS application.

CommScope’s portfolio of CBRS antenna solutions features singleband or multiband designs to support CBRS and legacy services. So, operators can consolidate antennas to reduce tower loading, OpEx and maintenance costs. When adding CBRS to multiband sites, the multiband integrated antennas increase network performance while decreasing your total cost of ownership.

When it comes to supporting the range of critical CBRS applications, the timing couldn’t be better. For example, with tens of millions of U.S. school students relying on remote learning, CommScope CBRS antenna solutions provide reliable coverage and capacity.

With future-ready models for sub-6 GHz bands, CommScope’s CBRS outdoor antennas keep you on the leading edge of network technology while providing more deployment flexibility. Optimized pattern choices support a variety of use cases—IoT, 5G, private networks and other emerging applications.

Meanwhile, our smarter antenna designs pay big dividends where it matters. CommScope’s twin-beam technology essentially doubles cell site capacity, enabling six-sector deployment at a lower cost. And, with M-LOC cluster connector technology, you can accelerate installation by reducing radio-to-antenna connections from eight to two and eliminating the need for extra weatherproofing.

**Flexibility and performance for any CBRS applications**

- **IoT**
- **5G**
- **Private networks**
- **Emerging applications**

- **Omni antenna solutions**
- **Twin beam antennas**
- **Sector antennas**
- **Strand mount antennas**

**Future-ready models for sub 6 GHz bands**
2SS-33A-R1 twin beam antenna

Twin-beam technology splits the main beam into two beams, essentially doubling capacity in split sector applications, while the 18 dBi gain increases uplink capacity. So, operators can provide six-sector coverage with just three antennas.

- Eight-port, twin-beam planar array
- 33-degree half-power beamwidth
- One internal RET tilts both beams simultaneously for uniform optimization
- Available with HELIAX® M-LOC cluster connectors (model: 2SS-33A-R1-V3)

SS-65M-R2 sector antenna

The SS-65M-R2 combines optimized pattern performance, high gain and an economical design. The result is a 65-degree sectorized CBRS antenna that is ideal for densely populated areas.

- 4T4R 65-degree sectorized antenna
- 18 dBi gain for increased uplink capacity
- Internal RET for independent tilt
- Available with HELIAX® M-LOC cluster connectors (model: SS-65M-R2-V3)

UU-360S-F omni antenna

High-gain omni-directional antenna maximizes macro-level coverage, making it ideal for rural areas.

- 360-degree omni design
- Gain maximized for the 2-ft height to improve uplink performance
- Optimized patterns for excellent coverage and capacity

SS-65T-F strand mount antenna

Strand mount antennas enable operators to add network capacity by mounting the antenna & radio equipment on their existing aerial utility lines. Reduced zoning restrictions enable operators to quickly deploy strand mount solutions.

- Designed for strand mounting with OEM equipment
- 4T4R 65-degree sectorized antenna
- Fixed tilt
CommScope: Opportunity without obstacles

The introduction of licensed and lightly-licensed CBRS spectrum creates new opportunities—increased capacity for existing networks, introduction of new services, and support for private networks. Leveraging these new opportunities requires a blend of technical expertise and trusted experience. That’s why cable networks, wireless operators, internet service providers and enterprises continue to rely on CommScope.

Our 40+ years of network expertise and leadership within the global standards bodies give CommScope the insight that enables you to be ready for what’s next. Our expansive size and scope mean you have the products, strategies and services to deploy faster, perform better and consistently deliver a superior customer experience.

Helping you maximize your CBRS opportunity while minimizing the obstacles is just another way we keep you out in front—today and tomorrow. For more information on CommScope’s CBRS base station antenna portfolio, contact our product management team or visit us online.
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