A trusted partner for Base station antennas

Vision for the future. And the expertise to get there.
Waves of wireless change—in technologies, frequencies and network requirements—are coming faster and larger. Mobile operators must accelerate and adapt or risk falling behind. Start with the linchpin of your network: your base station antennas.

For over 40 years, CommScope has led the way with a steady stream of antenna innovations that has kept mobile operators ahead of the changes and in control. Our breakthrough base station antenna technologies include the first polarization diversity antenna, first remote electrical tilt antenna, first ultra-wideband multiband antenna, and multibeam antennas.

But our ability to continually innovate on behalf of our customers is only part of the reason CommScope has earned its reputation as a trusted expert when it comes to base station antennas. To understand the big picture, read on.
The role of the trusted expert

Base station antenna performance is key to network efficiency, productivity and profitability. Selecting the right antenna is a methodical and rigorous process. For many mobile operators, however, the speed of change across the wireless industry adds an extra layer of complexity and difficulty to their decision.

• With LTE deployment still ramping up, demand for 5G service is already building. How will you integrate LTE into your current 3G and 4G systems while retaining the flexibility to add 5G NR when the time is right?

• 5G NR standards are still being developed; once released, the race to deploy can begin. Time to market will be critical. How do you ensure you will be the first in?

• With no widely accepted standards regarding how antenna specifications are reported on data sheets, how do you compare and select between two or more antennas?

Increasingly, antenna selection is about more than performance specs. It’s about the manufacturer’s ability to anticipate change and respond with the appropriate technology. Network operators need a trusted expert with the experience and vision to understand where the industry is going—a partner with the innovation, manufacturing quality and global resources to support your network from now till next.

For the world’s most important networks, that trusted partner is CommScope.
Trust built over time and repeated success

CommScope’s reputation as a trusted expert is built on over four decades of antenna innovations, customer service and success. It reflects our commitment to bold thinking informed by a broad and deep knowledge of the industry; highly rigorous design, engineering and testing; and some of the toughest manufacturing standards in the business.

- **Engineering and design:** CommScope’s annual investment of over $200 million in research and development has yielded more than 10,000 patents. During engineering and design, that innovation is put to the test. Before it can be approved, each new antenna design undergoes extensive simulation, prototyping and a battery of severe environmental tests to validate optimal RF performance and durability over time. Our in-house network experts analyze antenna performance through RF Planning simulations, resulting in an antenna that not only looks good from a specification sheet perspective, but is also documented to improve network KPIs.

- **Manufacturing and testing:** Prior to shipping, every antenna is tested for return loss, signal isolation and passive intermodulation (PIM). In most cases, our internal standards exceed those of the industry. Using advanced manufacturing automation, we deliver consistent antenna quality and performance—across product lines and manufacturing facilities.

- **Global presence:** CommScope’s global network includes more than 30 manufacturing and distribution facilities and more than 100 field engineers—plus sales and service offices in more than 100 countries.

- **Industry leadership:** As a participating member of many of the world’s network-focused standards bodies, such as AISG and NGMN, CommScope helps develop the standards upon which present and future networks will be based. We owe it to our customers and partners to know what’s next.

What should you expect from your base station antennas?

Today’s network requirements increase the challenges on your antennas.

See how we’re helping you meet them.
The confidence to go wherever opportunity takes you

To effectively compete and grow, you need to get more out of your base station antennas. For 40+ years, CommScope has invested every dollar and minute into earning your trust. Here are just a few of the many ways we repay you with confidence:

- **Future-ready solutions:** Our participation in standards development and commitment to R&D ensure you always have an open path to advanced technologies, new spectrum, and support for future performance requirements. It’s our job to know what’s next.

- **Guaranteed performance:** 100 percent production testing and our stringent manufacturing standards enable you to deploy your CommScope base station antennas with confidence. You know they will deliver the pattern performance, spectral efficiency and interference management you need to support today’s link budgets and tomorrow’s capacity requirements.

- **Right solution, right place, right time:** CommScope’s manufacturing, distribution and service network is globally positioned and locally focused. The ability to deliver the products you need—where and precisely when you need them—accelerates your time to market, gives you maximum flexibility and provides serious competitive advantages.

As mobile technologies accelerate, intangible assets like industry experience, technical expertise and an unequalled history of success become invaluable. We invite you to take a closer look at CommScope. Discover why so many of the world’s leading mobile network operators look to us as the trusted experts—the base station antenna partner who can take you wherever your opportunities lead.

5G antennas: requirements, myths and expectations

When it comes to 5G, there is no shortage of hype. But, when it comes to deployment, what do you need to know?

Start here
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

Contact a CommScope representative or our support team to learn more about our Base Station Antenna Solutions.