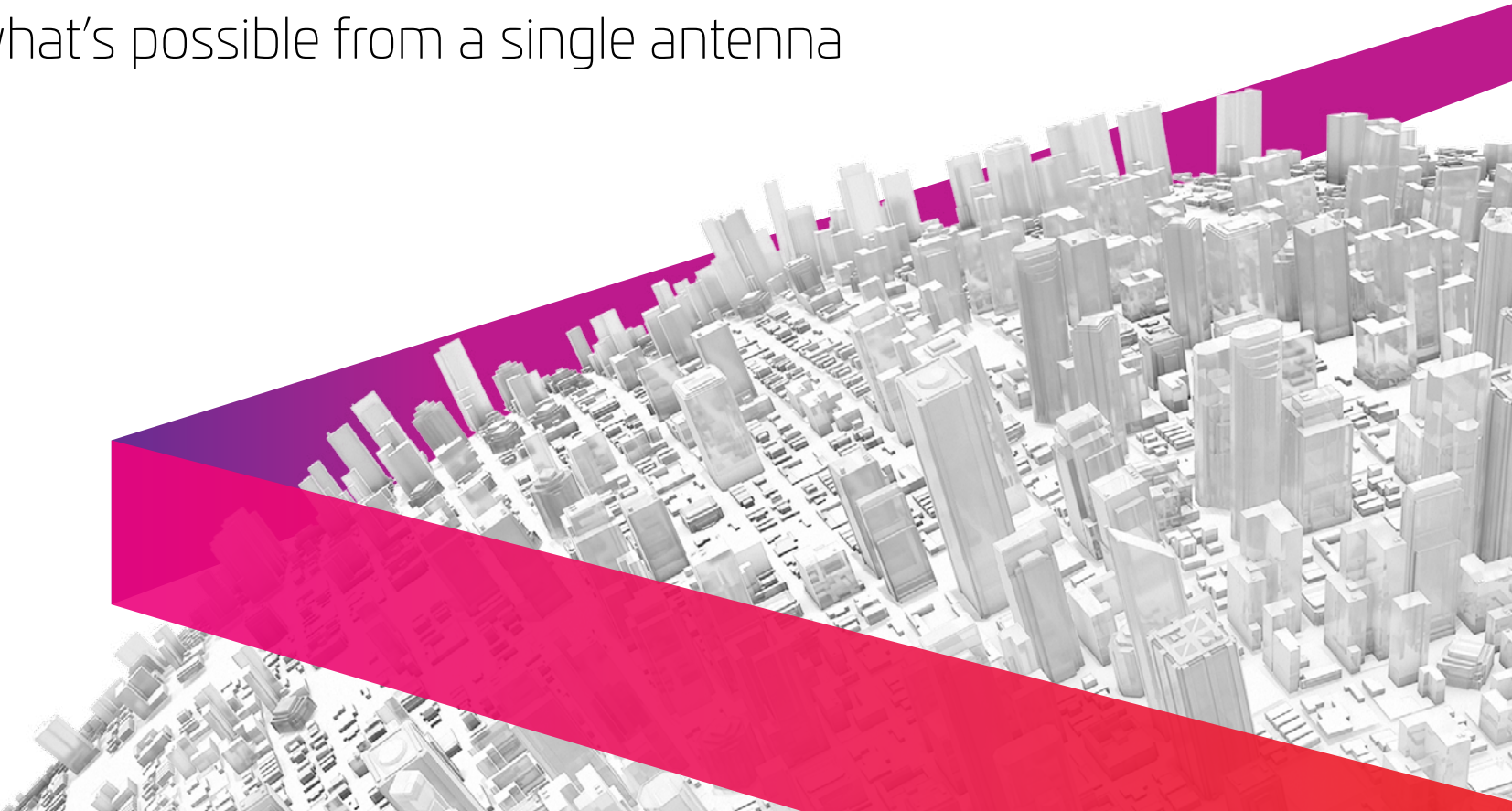


# Multiband Antenna Solutions

Pushing what's possible from a single antenna





## Network modernization— a multi-faceted challenge

While subscriber growth is slowing, wireless data traffic continues to significantly increase each year. What's more, subscribers are increasingly demanding more bandwidth with seamless, high-performance connectivity wherever they go.

For today's wireless network operator, meeting the challenges of next-generation applications and data demands begins by adding capacity. But that's only one piece of a much more complicated puzzle.

How do you balance the need for more capacity with:

- Proliferating technologies and bands
- Higher performance expectations
- Tighter CapEx/OpEx budgets
- More restrictive zoning requirements
- Uncertainty regarding future spectrum releases

You've come to the right place. Read on and see how CommScope's experience and innovation are enabling wireless operators around the world to do more with less.

# The increasing need to do more with less

In addressing the challenges of next-generation networks, start with your base station antennas. They are critical to enabling the performance, speed, applications and quality of service (QoS) customers expect.

Here's what we know:

- As the 5G era ramps up, the physical layer in RAN infrastructures for supporting both legacy and new technologies is suddenly becoming a lot more complicated.
- With existing sites fully loaded—and new sites hard to find—the challenge is how to increase antenna functionality while minimizing antenna counts, tower loads and leasing costs.
- As subscriber counts level out, competition for revenue heats up. The ability to roll out new services quicker, and without major redesigns in the RF path, provides a powerful competitive advantage.

These criteria define the next generation of base station antennas: solutions that deliver enhanced capabilities while holding the line on CapEx and OpEx, enabling you to address your current network challenges while preparing for what's next.

Unlock the potential  
in 4X MIMO  
Reach more users with  
gigabit speeds and  
save spectrum.

Read how.

On the road to  
Gigabit LTE?  
Antenna selection may  
be the most important  
decision you make.

Learn why.



# New challenges demand a new line of thinking.

At CommScope we never stop innovating to help you stay ahead of the changes in the market. Our multiband base station antennas are proof positive. Now you can add more network capacity, more ports and more spectrum—while making the most of your available space.

Our new portfolio of multiband antennas includes solutions with:

- Fully integrated 4X to 8X MIMO for low, mid and high frequency bands
- Support for [ultra-wideband](#) frequency ranges
- Independent RET beamtilt for optimized pattern control

CommScope multiband antennas allow you to take advantage of advanced modulation, carrier aggregation of unlicensed frequency, and gigabit speeds—all while maximizing your available space at the cell site and on the tower so you can better manage your antenna counts and minimize the impacts on tower loading, CapEx and OpEx cost. The bottom line is a stronger bottom line—supporting your capacity, performance, and spectrum needs for LTE and 5G deployments.

## Secrets to a simplified RF path

What to look for in a  
multiband combiner solution.

[Download now.](#)

## Why leave money on the tower?

Learn the real benefits  
of our fiber-to-the-antenna  
solutions.

[Read more!](#)

# CommScope multiband antennas provide results where you need them most

## Address your current capacity crunch

- Enable 4T4R and 8T8R beamforming radios on low, mid, and high bands to create more data streams, improve capacity and reach gigabit speeds
- Minimize interference and boost throughput by installing antennas that support 4X and higher orders of MIMO on an increased number of bands

## Streamline and empower your network

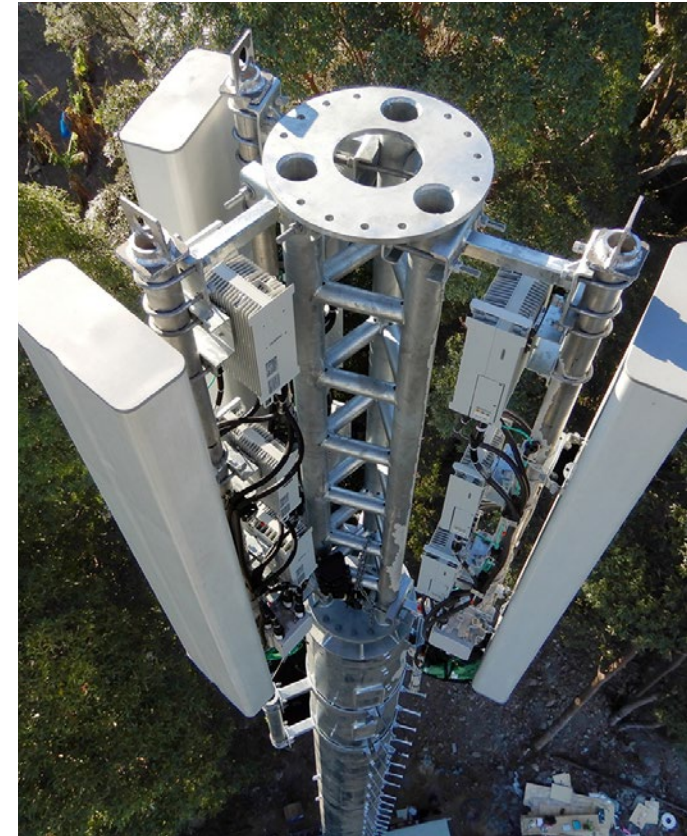
- Save tower loading, CapEx, OpEx, windload and leasing costs by streamlining antenna counts and installation time
- Utilize antenna sharing to trim CapEx and OpEx without sacrificing independent beam control or coverage efficiency

## Prepare for the changes that are coming

- Be ready to quickly roll out new spectrum, including the 3.5 GHz and 5 GHz bands, when the time is right
- Enable carrier aggregation of unlicensed bands and ultra-wideband support for high and low bands

The specific challenges you face today—transitioning to Gigabit LTE and 5G, planning for new spectrum, sharing radio resources—are new. But they all come back to a familiar theme: the need to do more with less, create more capacity, and support faster data speeds while reducing costs and the amount of hardware in the field.

At CommScope, it's a challenge we know well. We've been helping our customers overcome it for more than 40 years. With our ever-evolving portfolio of powerful and efficient multiband antennas, you're good to go for the foreseeable future. For the capacity-generating performance you need today and the wide-open opportunities your customers expect tomorrow—it pays to partner with CommScope.



Get more from your  
macro sites

Boost performance and capacity  
with RF transmission solutions  
from CommScope.

[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](https://www.commscope.com)

Contact a CommScope representative or our [support team](#) to learn more about our Base Station Antenna Solutions.



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