


# Metro Cell Antenna Solutions

Fast forward to the future. Let's make it possible.



CHAPTER 1

COMMSCOPE®



Anticipation of 5G is driving wireless expectations, and a steady supply of new connected devices is feeding the fire. Demand for instant connectivity and high-speed data is already pushing network capacity to its limits.

You need to grow capacity, especially in high-traffic urban areas—but new sites are difficult or impossible to secure. You need smarter coverage solutions that increase your flexibility—not your footprint.

Nobody knows this better than CommScope. We've spent years developing solutions for the challenges you face today. Our evolving portfolio of metro cell antenna solutions is proof positive.

# Three keys to network modernization

As a wireless operator, you must find ways to relieve the current strain on your networks. At the same time, you need to prepare your networks for the onslaught of high-capacity applications and demands of the near future. The challenge is three-fold:

## Spectrum

Recently released, conditional access to the 3.5 GHz citizens broadband radio services (CBRS) and the unlicensed 5 GHz band can provide additional bandwidth. The same is true for combining licensed LTE bands with unlicensed spectrum. But do you have the technology to leverage the new opportunities?

## Densification

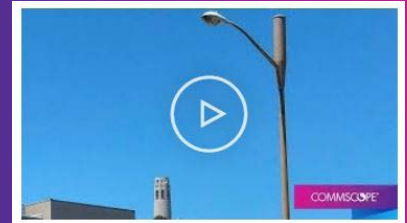
Increasing capacity means densifying networks to maximize frequency re-use—especially in heavily populated urban environments. That's tough to do given the tightening of local zoning restrictions, lack of available sites and the difficulty of increasing antenna functionality while decreasing its size.

## Efficiency

As urban networks densify and the use of 4x multiple-input, multiple-output (MIMO) technology expands, operators must be able to target coverage areas with pinpoint accuracy. This requires new antenna technologies that provide advanced coverage and interference control.

**CommScope has a solution for these challenges:** a whole new generation of metro cell antenna solutions that turns problems into potential.

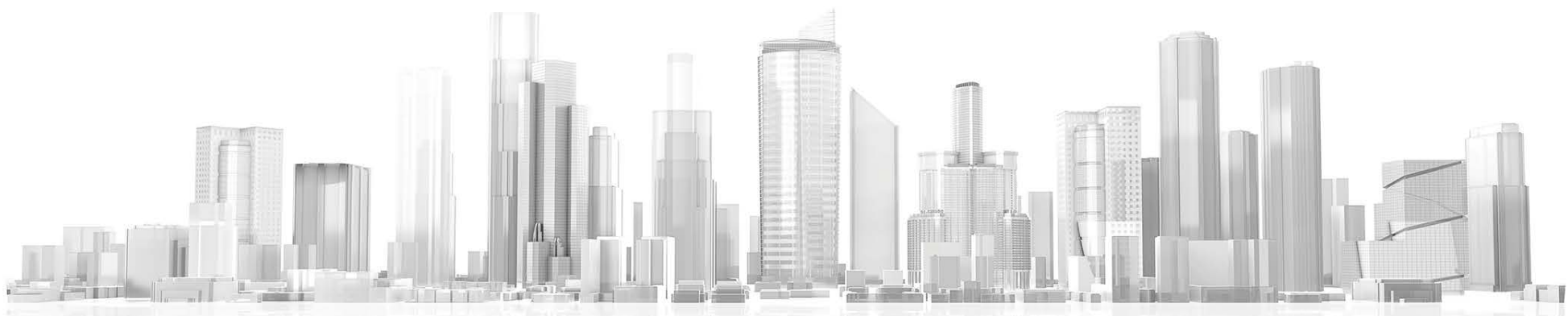
Quickly increase capacity



It's as easy as 1, 2, 3.  
Learn more.

Managing spectrum for maximum efficiency

See how CommScope gets it done!



# Advanced metro cell antennas—compact, concealed and capable

CommScope's advanced metro cell antennas open new opportunities for wireless operators as they move from Gigabit LTE to 5G. Designed for use in urban environments, they incorporate the most recent innovations in network densification, spectrum availability and per-site efficiency.

Innovative and compact, CommScope's advanced metro cell antennas facilitate site acquisition and install easily on virtually any vertical street furniture. But don't let the small size fool you.

This family of small cell antennas delivers support for 4x MIMO, real-time beamforming, and carrier aggregation with licensed and unlicensed spectrum—all in one package.

Compact, concealed and capable, CommScope advanced metro cell antennas dramatically increase the number and diversity of potential sites. So you can densify your network as needed and add the high-speed capacity and consistent quality of service your users expect.

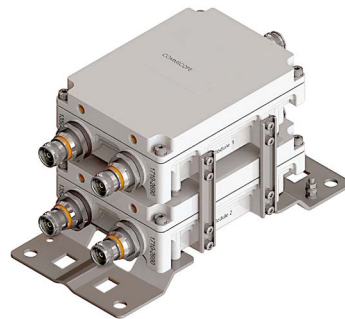


Getting smaller  
and smarter

Check out CommScope's  
portfolio of  
metro cell solutions



Add spectrum and reduce  
your RF path footprint



See how we make it possible!

# Our advanced metro cell antennas deliver more of what you need, where you need it

## More density

- Slim, compact size and deployment versatility ease zoning compliance and expand your site options so you can add cell density more quickly and easily.
- Multiple ports, frequencies and technologies in one small form factor can support more capacity with fewer antennas, leaving more sites available for cell densification.

## More spectrum

- Support all established 1.7–2.7 GHz LTE bands, 3.5 GHz (including bands used globally for 5G and CBRS in the U.S.), as well as 5 GHz unlicensed band, which can be used in licensed assisted access (LAA).
- Support 4x MIMO in the 1.7–2.7 GHz and 3.5 GHz bands, plus 2x MIMO in the 5 GHz band.

## More efficiency

- Increase cell coverage and improve quality of service with a unique pattern diversity approach that offsets pattern nulls between the four ports.
- Support real-time beamforming, suppress sidelobes, improve interference discrimination and reduce power use.
- Maximize gain for the 1.7–2.7 GHz bands while complying with U.S. FCC Part 15 for all 5 GHz bands, even when operating radios at full power.

There's no reason why you can't optimize antenna size and performance. The advanced capabilities of CommScope's metro cell antenna portfolio prove it. Delivering bandwidth without boundaries—just one more way we earn your trust every day.



Connect and empower your  
metro cell network

Discover new connectivity  
solutions from CommScope



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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