



# 4G/5G Outdoor Small Cell Solutions

Performance you can't miss  
from solutions you won't notice

# The small cell challenge: growing networks, shrinking footprints

Denser LTE and emerging 5G networks both demand more sites—and less visibility.

Your small cell network needs to meet customers where they are—on their residential streets, in their crowded commercial areas, and everywhere they live, work, and play.

Add in the thousands of various local planning permits governing the size, location and appearance of your small cell sites, and it

becomes clear that your network needs a comprehensive solution that solves for all these variables at the same time.

Your small cell choice needs to be compact, attractive, flexible and future ready. In other words, your small cell choice needs to be CommScope's Metro Cell solution.



# Metro Cell: the complete solution that solves the total challenge.



CommScope's Metro Cell solution is a complete small cell platform that helps you deploy quickly, economically and compliantly, in virtually any small cell situation.

Unlike cobbled-together solutions built from multiple vendors, CommScope's Metro Cell solutions are built as a complete answer to your small cell challenges, with single-source antennas, combiners, power management, backhaul and more all combined into a variety of attractive, customisable, local authorities compliant concealment options.

When you work with CommScope and our Metro Cell solutions, your deployment arrives ready to install

## You'll receive:

- Superior active and passive thermal management options
- Compatibility with all major manufacturers' radios
- A wide range of bottom-, middle-, top-of-pole, and integrated pole designs
- Customisable technical and aesthetic configuration choices
- CommScope's global distribution, installation and integration support
- Able to scale and meet multiple simultaneous large deployments



CommScope innovation unlocks the potential of your network.

For over 40 years, CommScope has been a global leader in pioneering RF technologies. With a manufacturing footprint that spans Europe, Asia, and North America, CommScope delivers consistent quality and breakthrough innovation on a scale (and on a schedule) that empowers the world's most important networks to grow and evolve.

Wherever networks face challenges, you can count on CommScope to help your network stay ahead of the curve by helping you solve both the technical and business challenges that could limit your network's potential. We are CommScope—and we believe in the power of progress.

# Built to perform, virtually invisibly







## Integrated straight pole

- Contains everything needed for a low-power LTE, 5G or combined LTE/5G network site
- 305mm diameter radio and power concealment modules
- Pole-top concealment module accommodates 5G or Fixed Wireless Access (FWA) radios
- GR-487 compliant thermal performance standards
- Variety of luminaire arms and other configuration options
- Optional mmWave module

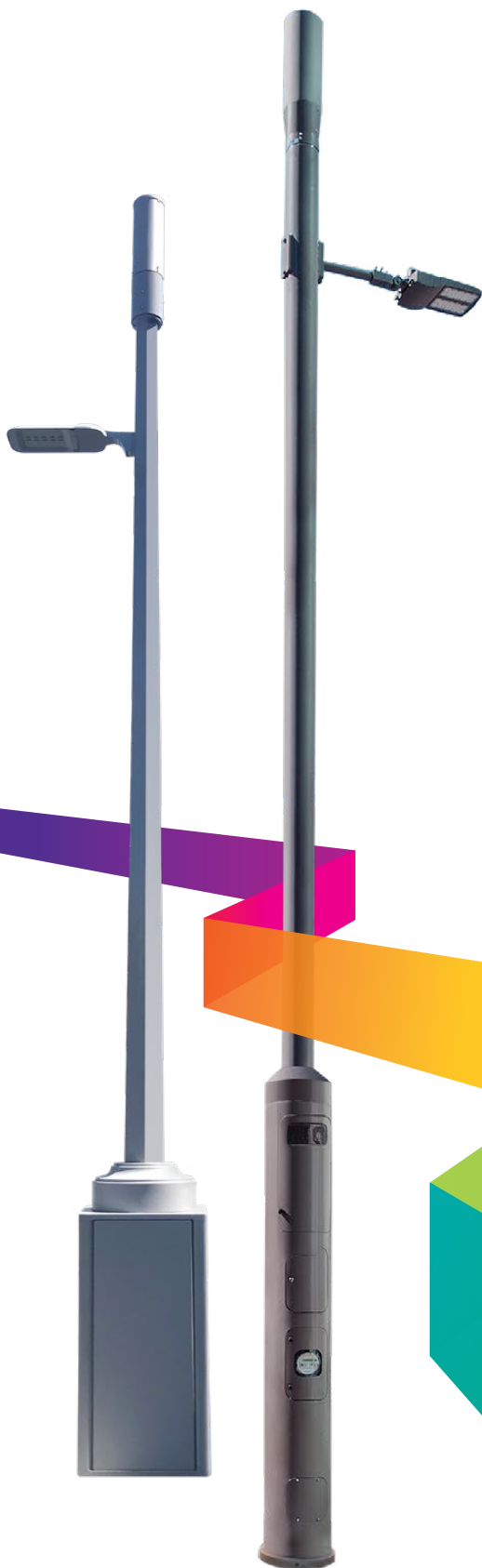


GREENWICH AV

ONE WAY

ALL TRAFFIC  
→

STANDING  
Time



## Integrated pole base

- Contains everything needed for a low-power LTE/5G network site
- 305mm or 457mm diameter power concealment and radio concealment modules
- 60 - 76cm square base options to accommodate low- to high-power single/dual-band radios
- Pole-top concealment module accommodates 5G Fixed Wireless Access (FWA) radios
- GR-487 compliant thermal performance standards
- Variety of luminaire arms and other configuration options
- Optional mmWave module





# Shroud options that fit any situation

The Metro Cell portfolio also offers a vast array of other concealment solutions for the top, middle or bottom of existing street furniture, with or without luminaires, of several diameters. These solutions deploy quickly and disappear into the urban landscape.



## 305mm pole top

- 305mm pole top (shown with mmwave module)
- Includes mounting for optional OVP
- Variety of pole mounting kits available
- Accepts various antenna models
- GR-487 thermally compliant



## 457mm pole top

- Accommodates all major radio manufacturers' 5W radios
- Variety of pole mounting kits available
- Accepts various antenna models
- GR-487 thermally compliant



## Mid-pole enclosure for pico/micro radios

- Lockable and accommodates all major radio manufacturers' radios
- Micro version accommodates two high-powered radios
- Configurable to include diplexers, splitters and mains power disconnect
- Mounts easily to tapered and non-tapered wood or composite poles
- GR-487 thermally compliant
- Available for mounting on metal, wood and concrete



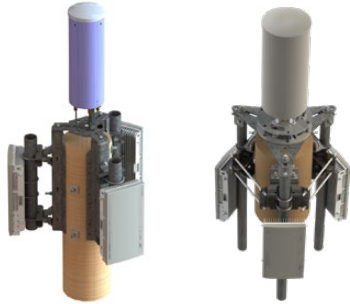
## CellSign

- Housing for small cell radios, BBU with integrated power, fibre, cooling and lighting
- Vendor agnostic, support range of 5W radios
- Compact concealment solution blends with existing (and new) shop signage
- Flexible design, overall concealment box sized to suite existing signage
- RF transparent, translucent panels with integrated lighting can be customised with desired logo and design
- Ideal for both capacity and coverage applications (e.g. launch of 5G demos, capacity in dense urban areas)

# Antenna mount options for flexible deployments

## CommScope's wide range of Metro Cell options gives your network more ways to grow.

Adding bands often means adding antennas. CommScope's diverse portfolio of Metro Cell solutions includes a range of pole mount options that let your network grow where and how it needs.



### LTE/5G mMIMO mounts

- One mount accommodates both LTE and 5G antennas
- Single-point contact for wood or metal poles up to 533mm OD
- Built for 240 kph/150 mph wind survivability
- Jumper mounting holes simplify cable management
- Through-mounting and banding attachment options



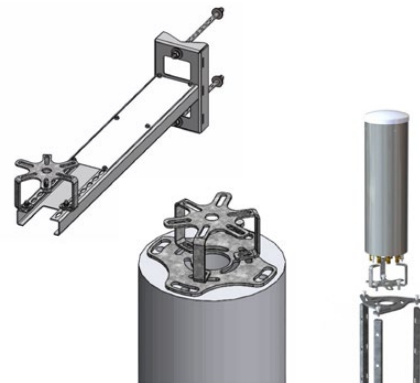
### Spool Mounting

- Universal mounting pipe for all OEMs and OEM Models of mMIMO radios
- Low profile mMIMO radio mounts provided to minimize outer diameter
- Accommodates mMIMO antenna concealment shrouds with or without down tilt brackets
- Mounting kits for wood, metal (optional), and concrete poles



### Small cell side mounts

- Multiple side-mount, through-mount and banded solutions
- Made for wood or metal poles up to 330mm OD
- Fully compatible with a wide range of antenna types
- Various stand-off options, with adjustable multi-antenna options
- Includes options for panel antennas



### Pole-top mounts

- Direct mount and pole-top standoff options
- Choice of pole diameter
- Choice of leg length/stand-off distance
- Fully compatible with a wide range of antenna types



# Integration services that help your network grow quickly

## CommScope doesn't just build the flexible solutions you need—we also make it easy to deploy them

Offering the flexible, customizable Metro Cell solution your network needs is only half the value. CommScope also provides best-in-class integration services to help your network deploy those solutions quickly and confidently.

CommScope's Metro Cell solutions are built as a complete platform, helping you avoid the unforeseen deployment challenges that can come from multi-vendor solutions and cobbled-together technologies. Metro Cell solutions deliver everything you need—antennas, combiners, power management, backhaul and more, all preconfigured and factory tested—in your choice of attractive, code-compliant concealment designs.

## CommScope makes it easy, because...

- Complete Metro Cell sites can be ordered by a single part number.
- Each solution arrives fully kitted, with antennas, diplexers, combiners, and more.
- Integrated pole solutions include foundation and structural calculations for quick deployment.
- From the smallest bracket to the largest integrated site, you'll have city and local planning permit compliant options.

For over 40 years, CommScope has been a complete partner to the world's most important wireless networks—because we understand that your technical challenges are only part of the picture. You can also count on CommScope's quality assurance, global manufacturing footprint, simple ordering and fast shipping to help your Metro Cell perform its best on day one, and for years to come.

# Metro Cell—the complete solution that’s completely configurable

## We build the technology that powers every solution we ship.

No other manufacturer offers a small cell solution that provides so many options, arrives so complete, or offers such configuration flexibility as does CommScope. That’s because CommScope builds world-class solutions covering every connection in modern RF networks—both cellular and Wi-Fi.

**We build Metro Cell as a complete solution because only CommScope offers such total expertise.**



### Small cell antennas

- Incredibly compact form factor and clean appearance designed to meet zoning requirements
- High-performance, high-efficiency operation
- Available in 10-, 14- and 16-port designs
- Multiband multiport designs support 4X MIMO, carrier aggregation and licensed assisted access (LAA) for CBRS bands

Rugged and durable for harsh environments

### Wireless access points (APs)

- CommScope’s Ruckus portfolio of Wi-Fi 6-certified provides unbeatable outdoor coverage
- Proprietary BeamFlex+ technology provides superior coverage and capacity by dynamically shifting channels
- Available multi-user MIMO (MU-MIMO) dramatically improves RF efficiency and overall throughput with fewer APs
- Options allow daisy-chaining of other IP-connected devices, such as video cameras





### Ultra-compact multiband combiners

- Solutions support multiple bands to simplify RF path connectivity between antennas and radios
- Allows the deployment of more bands to support denser LTE and new 5G networks
- Equipped with super-compact, PIM-reducing 4.3-10 connectors for easy installations and reliable connections
- 40 to 60 percent smaller—and lighter—than traditional combiners
- Designed for tight spaces in small cells, including Metro Cell integrated poles



### Small cell RF jumpers

- High-efficiency coaxial jumpers deliver cable performance in a 3/8 inch form factor for easier cable installation and management
- Guaranteed PIM performance at -119 dBm for D-class
- Ruggedized outdoor construction
- Wide band support, including for 5G networks
- Available with 4.3-10 or NEX10 connectors



### Fibre jumpers

- A vital, high-performance link between wired and wireless networks
- Compatible with a range of OEM radios, including 5G radios
- Flexible applications support multiple RRU configurations
- Plug-and-play installation for quick, confident installation
- Available in hardened and non-hardened varieties



### Wireline connectivity and fibre backhaul

- Fibre drop cables for ultra-efficient performance
- Fibre handoff solutions that speed connectivity and allow test access and the integration of WDM fibre optimization
- Wave division multiplexers (WDMs) that multiply network bandwidth on fibre backhaul without adding more infrastructure
- Fibre-optic splice closures that provide gel-sealed protection from the elements for vital fibre components at the entry point

## Power Solutions for Metro Cell Sites

- **Integrated power option:** Use AC grid power (commercial power) with an integrated rectifier—either mounted on the pole or in-line—with an available battery backup option
- **Distributed power option:** A single cabinet contains power supply, rectifier and battery backups to supply reliable power to one or multiple small cells



## Get the complete solution from CommScope

Your small cell network needs to grow now—talk with us for a better way forward.

Metro Cell integrated pole solutions are built for the way LTE and 5G small cell networks need to grow—quickly, simply and efficiently—so your network can meet your customers where they are...and do it virtually invisibly.

Count on CommScope to help your network evolve to win. Learn more about Metro Cells [here](#) or **contact your CommScope representative** to see how Metro Cell integrated pole solutions can unlock the potential of your small cell network.

[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://commscope.com)

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