



Multiband Combining Solutions

Deploy with higher efficiency and performance you can count on.

Simplification starts here

Today's outdoor wireless landscape is changing rapidly and growing in complexity. Determining the right configurations to support multiple bands with each application can be quite challenging. The recent rise in higher-order MIMO deployments also add significant levels of sophistication to site architectures.

By implementing a smart, more efficient plan, you can simplify these complexities and ensure you get the quality performance you expect. Proven multiband combiners from CommScope help you deploy faster and lower costs by reducing the number of required antennas and cables—all with assured performance.

With CommScope, you can accelerate site infrastructure upgrades, streamline connections at new site builds, and achieve excellent passive intermodulation (PIM) performance—all while modernizing your network with more bands and advanced MIMO technology.

With many design options available to meet your specific requirements, CommScope's multiband combiners help you succeed in today's demanding environment:

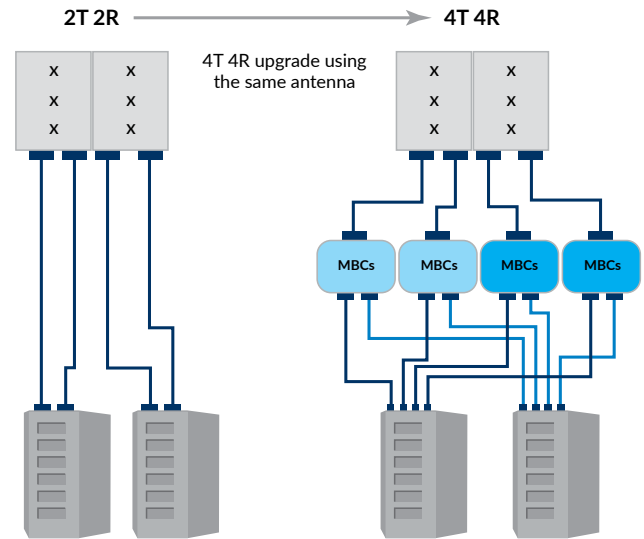
- Expedite the roll-out of new services with higher efficiency
- Save space while reducing weight and wind load
- Reduce CapEx and OpEx
- Deliver excellent PIM performance



The right solution

CommScope is committed to delivering the right combining solution for your site deployment needs. Choose from a wide variety of options. If you're not sure about band combinations with your existing bands, use CommScope's Universal Band and Block PIM calculator at commscope.com or email your frequency band requirements to mycombiner@commscope.com.

Our advanced multiband combiner designs support all major air interface technologies and cover global frequencies. Your network is too important to trust it to anything less than a world-class partner.



Features

- **Multiple styles.** Diplexers, triplexers, quadplexers and pentaplexers allow combinations of multiple bands to feed into a single RF path between the radio and the antenna.
- **Miniaturized profile.** Designed to provide the smallest profile possible for both macro and small cells.
- **Smart DC sensing.** The DC sensing designs automatically detect and route DC power and AISG signals to the appropriate port—removing the manual process for this requirement.
- **Universal mounting.** Convertible mounting brackets are included on many designs. They enable mounting to a standard pole, rod, wall, frame or rack, and give the added flexibility to make two-, four-, and six-pack space-saving assemblies.
- **4.3-10 connectors.** Available on many designs, these small connectors are easy for installers to access, and improve PIM performance.
- **PIM excellence.** Designed and tested to exceed industry practiced levels.

Equipment selection



- Choose components designed to minimize passive intermodulation (PIM) and test thoroughly for PIM after installation.
- Install multiband antennas to cover today's needs and plan ahead for tomorrow's additional spectrum.
- To minimize interference resulting from co-sited components, include combining and filtering solutions that prevent adjacent-channel interference.

Reliable, proven performance

Investing in solutions to increase performance and reliability is no small undertaking. Solving one problem—only to face new ones because of unproven or inadequate testing practices—can be disastrous. To ensure PIM and RF performance meet specifications in harsh, real-world environments, CommScope is redefining PIM testing for filter products. Our multiband combiners undergo rigorous testing designed to help you build highly efficient, virtually PIM-free networks that deliver consistently superb performance.

[Watch this video](#) to learn more about our testing practices.



Patent pending PIM test delivers twice the intensity of standard industry tests.

Deploy faster, cut costs, and protect your investment

Move past the complexities. Choose CommScope for multiband combining solutions that will help you move forward faster with your site deployments. By partnering with a world leader in RF expertise, you will be ready to support your site architecture plans—meaning your subscribers can be confident in the quality and reliability of your service. Reduce site complexity, speed deployments, and save on CapEx and OpEx.

Your network depends on best-in-class solutions. CommScope makes high-quality, high-performance multiband combiner solutions that withstand punishing environments to deliver trusted reliability. With CommScope as your partner, you can deploy faster with the assurance that your network will benefit from industry-leading expertise and best-in-class support at every stage.

If frequency mix complexity is proving difficult, give the experts at CommScope an opportunity to solve your site architecture challenges.

Everyone communicates. It's the essence of the human experience. How we communicate is evolving. Technology is reshaping the way we live, learn and thrive. The epicenter of this transformation is the network—our passion. Our experts are rethinking the purpose, role and usage of networks to help our customers increase bandwidth, expand capacity, enhance efficiency, speed deployment and simplify migration. From remote cell sites to massive sports arenas, from busy airports to state-of-the-art data centers— we provide the essential expertise and vital infrastructure your business needs to succeed. The world's most advanced networks rely on CommScope connectivity.

COMMScope®

commscope.com

Visit our website or contact your local CommScope representative for more information.

© 2017 CommScope, Inc. All rights reserved.

All trademarks identified by ® or ™ are registered trademarks or trademarks, respectively, of CommScope, Inc. This document is for planning purposes only and is not intended to modify or supplement any specifications or warranties relating to CommScope products or services. CommScope is certified according to ISO 9001, TL 9000, and ISO 14001.

BR-111701.1-EN (08/17)



For more information on combining solutions, read CommScope's eBooks on *LTE Best Practices* and *Understanding the RF Path*. Visit our website for [product details](#). Contact your CommScope representative today to discuss your challenges with cell site architectures.