

CommScope's Mosaic® platform integrates 4G and 5G in a single simplified deployment



While 5G deployments are a top priority for network operators all over the world, those deployments can't come at the expense of existing 4G networks, which will continue to be an important, profitable technology for years to come. Overlaying 5G means adding antennas to existing sites—and that can pose challenges in tower weight, wind load and appearance.

The Mosaic platform unchains network evolution

CommScope offers a way to combine 4G and 5G technologies in a smart, compact, integrated solution: the Mosaic platform. Modular and upgradable, Mosaic makes it simple and economical to co-site 4G and 5G passive and active radio technology. Operators can customize Mosaic antennas for length, band, port count and more, so they can support still-profitable legacy technologies while embracing a clear, simple upgrade path to 5G mMIMO.

Most importantly, Mosaic antennas are no larger than current 4G-only antennas, so there's no additional wind load, no additional aesthetic concerns and very little weight added. Plus, upgrading to Mosaic doesn't require re-optimization of 4G network coverage.





Lift. Slide. Tighten. Done.

The Mosaic® platform is designed for total flexibility and total simplicity in installation. Its modular, integrated design installs in three simple steps: lift, slide and tighten.

There's no faster, simpler and more sure way to deploy combined active and passive antenna infrastructure to a new or upgraded site.

Build a future-ready network on the Mosaic platform

Mosaic is built to optimize operator choice, reduce deployment challenges and reduce costs from every angle.

- **Flexible design:** Mosaic combines a multiband passive antenna with a partner active antenna system (AAS) for a complete site solution.
- **Interleaved technology:** Our proven, patented interleaved technology allows full-gain low-band arrays with no degradation in FDD performance.

- **Multiple configurations:** Mosaic antennas are available in different lengths, port counts and supported bands; it incorporates passive beamforming arrays and supports all legacy sub-6 GHz technology up to 8T8R. The platform supports 1.8 to 2.7 meter lengths with four low-band ports and four to eight mid-band ports as well as 1.5 meter length with four low-band ports and four mid-band ports.
- **Ease of installation:** As a single-piece passive antenna capable of independent deployment—fully enclosed and environmentally sealed—easing field installation of OEM or Open RAN radios and RU alignment with simple downtilt.
- **Testing:** The radio unit system and passive system can be independently tested.
- **PIM performance:** Mosaic's factory-validated cross-band PIM management optimizes network performance.
- **No need for network coverage re-optimization:** Mosaic enables the replacement of multi-port/multiband antennas with solutions offering the same pattern performance and coverage, eliminating the need to re-optimize the network.

Simplification



The Mosaic platform's agile, plug-and-play design enables operators to deploy active, passive or combined solutions as needed, where needed, quickly and without the need to re-zone the site.

Network planning flexibility



The Mosaic platform hosts the radio(s) that best suit your network (32T32R/64T64R or 8T8R RRH with interleaved antenna module), with the ability to upgrade without expanding footprint or degrading network performance.

Reduced TCO



Thanks to a wide range of deployment and operational efficiencies, including 20 percent wind loading reduction and effective PIM management while maintaining legacy network coverage footprint and performance.

Learn more about Mosaic by viewing this brief video from OWN CTO, Mike Wolfe.

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CO-116551.2-EN (08-23)