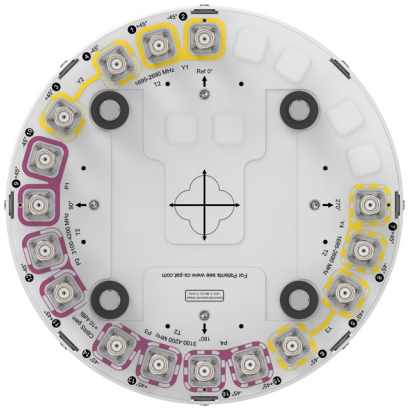
OMNI BEAMFORMING ANTENNAS FOR SMALL CELLS

As outdoor network providers work overtime to meet 5G demands, they must thread a very small needle: improve 3.5 GHz TDD mid band coverage and capacity while minimizing costs. Many sites, especially small cells, need 360-degree coverage but can't accommodate a large tri-sector radio/antenna solution. Even if they could, 4T4R antennas and their lower-power radios lack the gain for adequate capacity and coverage, while 16T16R M-MIMO solutions provide more capacity than needed and are expensive and large.

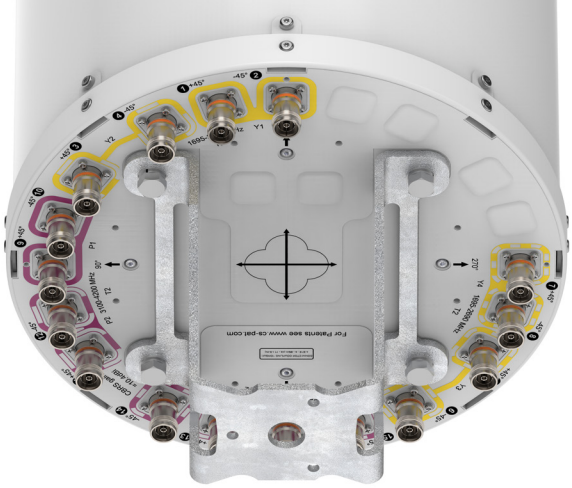


The ideal solution is a quality, technology-agnostic 8T8R omni beamformer. Andrew delivers.

Andrew 8T8R omni beamforming antennas enable a best-fit small cell solution for mid- and high-capacity C-band applications. Combining the space savings of an omni directional multi-band canister antenna with the performance of a beamformer, they balance capacity, deployment speed and cost. Compared to 4T4R solution these omni beamformers provide higher power (320W vs 80W), higher gain (15dBi vs 10dBi) and better coverage and capacity. Compared to 16T16R solutions they deliver higher EIRP (gain + power) in a smaller footprint and with a lower CapEx and Opex when considering all system components.

The perfect balance of power, performance and size

Andrew 8T8R omni beamforming antennas are available in a compact dual-band, 16-port size that's perfect for use where space is limited as well as a larger 24-port model that supports low band, mid band and 3.5 GHz frequencies. One compact and robust 360-degree antenna does the work of three sectorized antennas speeding installation and eliminating the need for an additional RAD center.



Enhanced capacity and coverage

- Increased gain for 3.5 GHz 5G applications
- More power, higher gain, and better coverage and capacity than 4T4R antennas
- Higher EIRP with reduced CapEx and smaller footprint than 16T16R solutions

Simplification and speed of deployment

- Same footprint as legacy antennas eliminates extra rad center and simplifies design and zoning
- 24" x 14.6" (610 mm x 370 mm) diameter housing as well as in a high gain version.
- Single antenna deployment versus multiple antennas

Lower total cost of ownership (TCO):

- Eliminates extra Rad Center and simplifies structure design and zoning approval
- Eliminates the need for additional expensive BBUs
- Higher EIRP than 16T16R tri-sector with lower Capex and lower energy usage

Going where other mid- to high-capacity small cell antennas can't

In developing our omni beamforming antennas, Andrew's Outdoor Wireless Network business segment drew on 85+ years of field and lab expertise—experience that translates into direct benefits for your small cell deployments. Now you can generate high-gain omni beam patterns, as well as a wide variety of fixed patterns with arbitrary shapes, with one antenna. We also leveraged our experience in antenna siting and zoning, enabling you to replace existing sectorized antennas without additional regulatory approvals or a second RAD center. Our technical capabilities and commitment to the customer have helped make Andrew's OWN a global partner for some of the world's most respected outdoor wireless network providers.

For the perfect balance of power, performance and size, rely on Andrew. To learn more about Andrew's portfolio of omni beamforming outdoor antennas, contact your Andrew representative.

Since 1937, Andrew, an Amphenol company, has driven the evolution of wireless technology. Trusted by mobile network operators and enterprises globally, we work closely with our customers to deliver innovative solutions that enhance connectivity experiences both outdoors and indoors. Our dedicated global team is committed to advancing the industry, fueled by the vision that a better-connected future is possible.

ANDREW.COM **Visit our website or contact your local ANDREW representative for more information.**