

# 14-port Ultra-Wideband Base Station Antenna: New Product

CommScope introduces our next 14-port ultra-wideband antenna, featuring internal diplexer technology that enables wireless operators to install one antenna where multiples were previously needed. The EGZV4-65D-R6 ultra-wideband antenna is the next in CommScope's ultra-wideband antenna family to incorporate 2 horizontally-spaced low band arrays in a 498 mm-wide package. One of this low band arrays is element diplexed to incorporate additional 2 input connectors. This arrangement allows operators to separate 700, 800 and 900 frequency bands whilst providing 2 times High Band 4x MIMO capability. The new 14-port antenna reduces required antenna counts—lowering tower leasing costs and speeding up deployments.

This antenna system is also optimized for high performance in capacity-sensitive, data-driven environments.

- **Future-ready site deployments, ultra-wideband on low & high bands**
  - For lower bands, supports LTE 700, LTE 800, separated from GSM900 / LTE900 applications
  - For higher bands, supports LTE 1800, 1900, 2100 MHz and 2.6 GHz networks
- **Element diplexed technology** reduces the antenna size and maintains independent downtilt control for two low band systems whilst one system stays wide band 694-960MHz
- **Two sets of 2+2 horizontally-spaced high band arrays** for optimum MIMO capability. 4X2 and 4X4, including carrier aggregation support.
- **New Low and High Band radiator designs** for optimum RF performance.
- Supports **re-configurable antenna sharing capability** enabling control of the internal RET system using up to two separate RET compatible OEM radios
- **Internal RET System** is full interoperability with all major RAN platforms. Cascaded single RET using AISG 2.0 protocol. Color coding helps ensure proper electrical tilt configurations (see Array Layout graphic).
- **4.3-10 connectors** reduce the size on the antenna end cap and provides exceptional intermodulation stability on the connector level.



Port Configuration



Array Layout

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-862	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	880-960	3-4	2	CPxxxxxxxxxxxxxxxxR2
R3	694-960	5-6	3	CPxxxxxxxxxxxxxxxxR3
Y1	1695-2690	7-8	4	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	9-10	5	CPxxxxxxxxxxxxxxxxY2
Y4	1695-2690	13-14		
Y3	1695-2690	11-12	6	CPxxxxxxxxxxxxxxxxY3

Left Bottom Right

(Sizes of colored boxes are not true depictions of array sizes)

Ordering Information:

Please visit [eCatalog](#) for product details.

Part Number	Beamwidth	Frequency (MHz)	Length	RET option
EGRV4-65D-R6	7 x 65°	694–862 / 2-ports 880–960 / 2-ports 694-960 / 2-ports 1695–2690 / 8-ports	2.7 m	6 internal CommRET v2 motors; 1 AISG I/O port pair; cascaded SRET mode