

EGZV4-65D-R6



14-port sector antenna, 2x 694–862, 2x 880–960, 2x 1427–2690 and 8x 1695–2690 MHz, 65° HPBW, 6x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- Electrical tilt settings applicable to RF Ports R1, R2, Y2, Y3 & Y5 can be set independently (See Array Layout and RET Table below)
- A common electrical tilt setting is shared by RF Ports Y1/Y4 for MIMO 4X4 purposes

Electrical Specifications

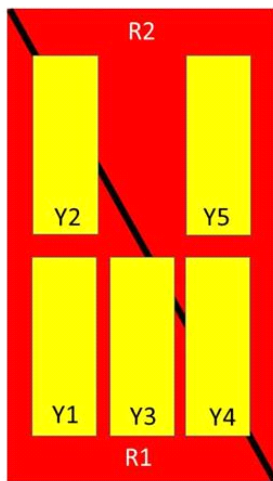
	R1	R2	Y1-Y2/Y4-Y5	Y1-Y2/Y4-Y5	Y1-Y2/Y4-Y5	Y1-Y2/Y4-Y5	Y3	Y3
Frequency Band, MHz	694–862	880–960	1695–1920	1920–2200	2300–2500	2500–2690	1427–1518	1695–2690
Gain, dBi	16.3	16.5	17.0	17.8	18.3	17.7	15.3	17.6
Beamwidth, Horizontal, degrees	65	64	68	64	62	63	68	59
Beamwidth, Vertical, degrees	8.5	7.4	7.2	6.5	5.7	5.4	9.3	6.8
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	20	16	17	16	16	15	14
Front-to-Back Ratio at 180°, dB	35	31	33	35	34	32	32	35
Isolation, Cross Polarization, dB	27	27	27	27	27	27	25	25
Isolation, Inter-band, dB	28	28	25	25	25	25	28	25
VSWR Return Loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	250	250	200	200	200	200	250	200
Polarization	±45°	±45°	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	694–862	880–960	1695–1920	1920–2200	2300–2500	2500–2690	1427–1518	1695–2690
Gain by all Beam Tilts, average, dBi	16.1	16.3	16.5	17.3	17.7	17.2	15.0	16.8
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.5	±0.6	±0.6	±0.7	±0.5	±0.5	±1.1
Gain by Beam Tilt, average, dBi	2° 15.8 7° 16.1 12° 16.1	2° 15.9 7° 16.4 12° 16.4	2° 16.3 7° 16.6 12° 16.5	2° 17.1 7° 17.4 12° 17.2	2° 17.6 7° 17.9 12° 17.4	2° 17.1 7° 17.3 12° 16.9	2° 14.9 7° 15.1 12° 14.9	2° 16.7 7° 17.0 12° 16.7
Beamwidth, Horizontal Tolerance, degrees	±2.7	±2.3	±4.9	±5.7	±5.4	±5.4	±7.7	±8.6
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.4	±0.4	±0.5	±0.3	±0.2	±0.4	±1.4
USLS, beampeak to 20° above beampeak, dB	18	20	14	16	15	14	11	13
Front-to-Back Total Power at 180° ± 30°, dB	27	23	24	27	28	27	27	29
CPR at Boresight, dB	16	17	19	22	19	20	17	20
CPR at Sector, dB	10	8	8	6	9	10	7	4

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

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
Y1	1695-2690	5-6	4	CPxxxxxxxxxxxxxxxxY1
Y4	1695-2690	11-12		
Y3	1427-2690	9-10	3	CPxxxxxxxxxxxxxxxxY3
Y2	1695-2690	7-8	6	CPxxxxxxxxxxxxxxxxY2
Y5	1695-2690	13-14	5	CPxxxxxxxxxxxxxxxxY5

Left Bottom Right

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

Port Configuration



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General Specifications

Operating Frequency Band	1427 – 2690 MHz 1695 – 2690 MHz 694 – 862 MHz 880 – 960 MHz
Antenna Type	Sector
Band	Multiband
Performance Note	Outdoor usage
Total Input Power, maximum	1,000 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total	14
RF Connector Quantity, low band	4
RF Connector Quantity, high band	10
RF Connector Interface	4.3-10 Female
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	129.0 lbf @ 150 km/h 574.0 N @ 150 km/h
Wind Loading, lateral	422.0 N @ 150 km/h 94.9 lbf @ 150 km/h
Wind Loading, maximum	981.0 N @ 150 km/h 220.5 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	2688.0 mm 105.8 in
Width	395.0 mm 15.6 in
Depth	228.0 mm 9.0 in
Net Weight, without mounting kit	46.6 kg 102.7 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal RET	High band (4) Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male

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Packed Dimensions

Length	2821.0 mm 111.1 in
Width	505.0 mm 19.9 in
Depth	386.0 mm 15.2 in
Shipping Weight	65.7 kg 144.8 lb

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU

ISO 9001:2015

China RoHS SJ/T 11364-2014

Classification

Compliant by Exemption

Designed, manufactured and/or distributed under this quality management system

Above Maximum Concentration Value (MCV)



Included Products

BSAMNT-4 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note

Severe environmental conditions may degrade optimum performance