

# EGRV4-65D-R6



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

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- A common electrical tilt setting is shared by RF Ports Y2/Y4 for MIMO 4X4 purposes

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	8
<b>RF Connector Quantity, low band</b>	6
<b>RF Connector Quantity, total</b>	14

## Remote Electrical Tilt (RET) Information

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

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## Dimensions

<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2688 mm   105.827 in
<b>Net Weight, without mounting kit</b>	59.8 kg   131.836 lb

## Array Layout

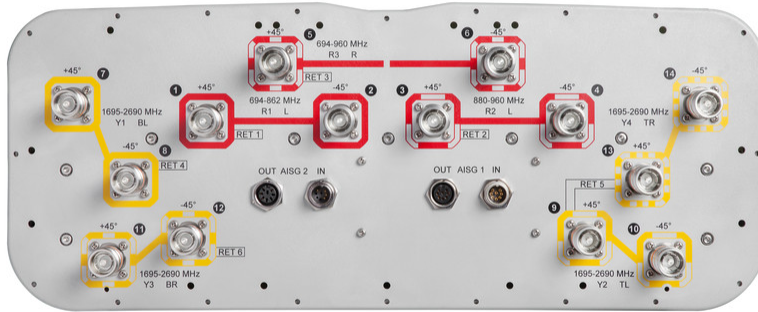
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-862	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	880-960	3-4	2	CPxxxxxxxxxxxxxxxxR2
R3	694-960	5-6	3	CPxxxxxxxxxxxxxxxxR3
Y1	1695-2690	7-8	4	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	9-10	5	CPxxxxxxxxxxxxxxxxY2
Y4	1695-2690	13-14		
Y3	1695-2690	11-12	6	CPxxxxxxxxxxxxxxxxY3

Left Bottom Right

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

## Port Configuration

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## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2690 MHz   694 – 862 MHz   694 – 960 MHz   880 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Electrical Specifications

	R1	R2	R3	R3	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4
<b>Frequency Band, MHz</b>	<b>694–862</b>	<b>880–960</b>	<b>694–890</b>	<b>880–960</b>	<b>1695–1920</b>	<b>1920–2180</b>	<b>2300–2500</b>	<b>2500–2690</b>
<b>Gain, dBi</b>	15.7	16.2	16.3	17	17.2	18	18.3	17.9
<b>Beamwidth, Horizontal, degrees</b>	68	62	68	62	60	61	64	69
<b>Beamwidth, Vertical, degrees</b>	8	6.9	7.8	6.8	7.4	6.6	5.6	5.3
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	14	17	14	17	20	20	17	16
<b>Front-to-Back Ratio at 180°, dB</b>	30	31	30	31	36	37	34	32
<b>Isolation, Cross Polarization, dB</b>	28	28	28	28	28	28	28	28

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<b>Isolation, Inter-band, dB</b>	28	28	28	28	28	28	28	28
<b>VSWR   Return loss, dB</b>	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	300	250	300	300	250	250	200	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>694–862</b>	<b>880–960</b>	<b>694–890</b>	<b>880–960</b>	<b>1695–1920</b>	<b>1920–2180</b>	<b>2300–2500</b>	<b>2500–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	15.4	15.9	16	16.7	16.7	17.5	17.8	17.4
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.4	±0.6	±0.3	±0.8	±0.5	±0.6	±0.5
<b>Gain by Beam Tilt, average, dBi</b>	2° 15.4 7° 15.5 12° 15.3	2° 15.9 7° 16.0 12° 15.7	2° 16.0 7° 16.1 12° 15.8	2° 16.7 7° 16.9 12° 16.5	2° 16.5 7° 16.8 12° 16.7	2° 17.1 7° 17.6 12° 17.5	2° 17.4 7° 17.9 12° 17.8	2° 17.1 7° 17.6 12° 17.3
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±5.6	±4.4	±4.1	±4.3	±4.1	±2.8	±5.7	±5.1
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.6	±0.4	±0.8	±0.4	±0.5	±0.5	±0.3	±0.2
<b>USLS, beampeak to 20° above beampeak, dB</b>	14	16	13	16	14	16	15	13
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	20	22	21	23	30	30	28	27
<b>CPR at Boresight, dB</b>	24	24	25	25	19	22	18	17
<b>CPR at Sector, dB</b>	9	7	7	8	9	9	9	6

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	1,070.0 N @ 150 km/h (240.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	375.0 N @ 150 km/h (84.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,385.0 N @ 150 km/h (311.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	880.0 N @ 150 km/h (197.8 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	565 mm   22.244 in
<b>Depth, packed</b>	309 mm   12.165 in
<b>Length, packed</b>	2935 mm   115.551 in
<b>Weight, gross</b>	78.2 kg   172.401 lb

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## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



## 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. |
| BSAMNT-M4 | - | Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.                            |

## \* Footnotes

**Performance Note**      Severe environmental conditions may degrade optimum performance