

# EGRZZHHTT-65A-R8



18-port sector antenna, 2x 694–862, 2x 880–960, 2x 694–960, 4x 1427–2690, 4x 1695–2180 and 4x 2490–2690 MHz, 65° HPBW, 8x 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
- Antenna shape optimized for wind load reduction

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	12
<b>RF Connector Quantity, low band</b>	6
<b>RF Connector Quantity, total</b>	18

## Remote Electrical Tilt (RET) Information

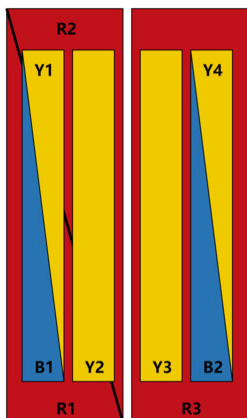
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (3)   Mid band (5)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

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<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	1600 mm   62.992 in
<b>Net Weight, antenna only</b>	40.4 kg   89.067 lb

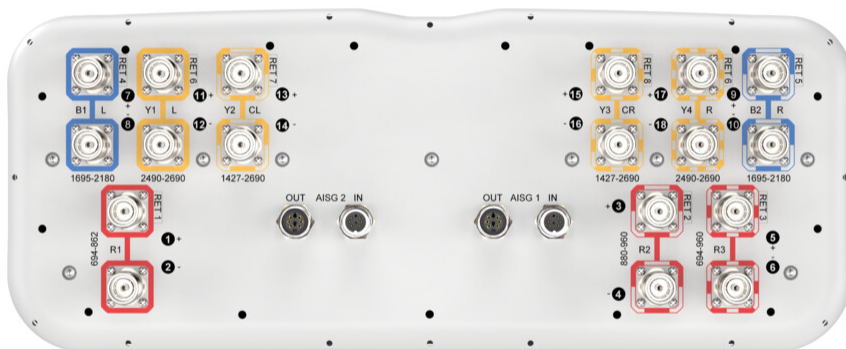
## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-862	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	880-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
R3	694-960	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxR3
B1	1695-2180	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxB1
B2	1695-2180	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxB2
Y1	2490-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxxY1
Y4	2490-2690	17 - 18			
Y2	1427-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1427-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxxxY3

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

## Port Configuration



## Electrical Specifications

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<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1427 – 2690 MHz   1695 – 2180 MHz   2490 – 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

	<b>R1</b>	<b>R1</b>	<b>R2</b>	<b>R3</b>	<b>R3</b>	<b>R3</b>
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–862</b>	<b>880–960</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>
<b>RF Port</b>	1,2	1,2	3,4	5,6	5,6	5,6
<b>Gain at Mid Tilt, dBi</b>	13.4	13.6	13.8	13.9	14.3	14.4
<b>Beamwidth, Horizontal, degrees</b>	71	67	65	71	67	65
<b>Beamwidth, Vertical, degrees</b>	13.5	12.7	11.7	13.8	12.7	11.6
<b>Beam Tilt, degrees</b>	3–16	3–16	3–16	3–16	3–16	3–16
<b>USLS (First Lobe), dB</b>	16	15	13	16	17	16
<b>Front-to-Back Ratio at 180°, dB</b>	30	30	28	30	27	28
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	20	20	20	19	20	21
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	25	25	25	25
<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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	300	300	300

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–862</b>	<b>880–960</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>
<b>Gain by all Beam Tilts, average, dBi</b>	13.3	13.5	13.6	13.8	14.2	14.3
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.4	±0.4	±0.3	±0.5	±0.4
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±10	±5	±3	±7	±4	±5
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.9	±0.6	±1	±1	±0.9	±0.9

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USLS, beampeak to 20° above beampeak, dB	16	15	13		16	15
CPR at Boresight, dB	20	19	18	20	20	18
CPR at Sector, dB	12	9	11	12	10	12

## Electrical Specifications

	B1,B2	B1,B2	Y1,Y4	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3
<b>Frequency Band, MHz</b>	<b>1695–1995</b>	<b>1920–2180</b>	<b>2490–2690</b>	<b>1427–1518</b>	<b>1695–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>RF Port</b>	7-10	7-10	11,12,17,18	13-16	13-16	13-16	13-16	13-16
<b>Gain at Mid Tilt, dBi</b>	16.7	17.5	17.8	15.4	16.9	17.7	18.2	18.1
<b>Beamwidth, Horizontal, degrees</b>	69	63	56	73	64	60	58	57
<b>Beamwidth, Vertical, degrees</b>	6.1	5.6	4.6	8	6.4	5.7	4.9	4.6
<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>	16	16	17	17	16	16	16	16
<b>Front-to-Back Ratio at 180°, dB</b>	32	31	31	31	32	32	31	30
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	26	25	26	24	26	26	26	26
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	25	25	25	25	25	25
<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>	250	250	150	250	250	250	200	200

## Electrical Specifications, BASTA

	1695–1995	1920–2180	2490–2690	1427–1518	1695–1995	1920–2300	2300–2500	2490–2690
<b>Frequency Band, MHz</b>								
<b>Gain by all Beam Tilts, average, dBi</b>	16.6	17.3	17.6	15.4	16.8	17.5	17.9	17.8
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.9	±0.5	±0.5	±0.3	±0.6	±0.5	±0.5	±0.9
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±7	±7	±4	±8	±5	±3	±6	±8
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.5	±0.4	±0.2	±0.3	±0.5	±0.5	±0.3	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	14	14	12	13	15	15	16	16

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<b>CPR at Boresight, dB</b>	22	22	17	15	21	19	19	19
<b>CPR at Sector, dB</b>	4	4	1	8	6	4	4	2

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	544.0 N @ 150 km/h (122.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	142.0 N @ 150 km/h (31.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	723.0 N @ 150 km/h (162.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	374.0 N @ 150 km/h (84.1 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>	368 mm   14.488 in
<b>Length, packed</b>	1775 mm   69.882 in
<b>Weight, gross</b>	54.2 kg   119.49 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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