

# RRZZHHTT-65B-R8NV3



16-port sector antenna, 4x 694–960, 4x 1427–2690, 4x 1695-2180 and 4x 2490-2690 MHz, 65° HPBW, 8x RET

- SEED® antenna providing high gain and improved efficiency
- High radiation and pattern efficiency for improved coverage area, capacity or reduced power consumption for a given area
- Reduces the amount of aluminum used to minimize CO2 release
- Innovative aerodynamic shape optimized for reduced wind loading in every direction
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- Retractable tilt indicator rods

## 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
<b>Radome Material</b>	GFRPP
<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>	4
<b>RF Connector Quantity, total</b>	16

## Remote Electrical Tilt (RET) Information

<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (6)
<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)

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## Dimensions

<b>Width</b>	430 mm   16.929 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2100 mm   82.677 in
<b>Net Weight, antenna only</b>	37.3 kg   82.232 lb

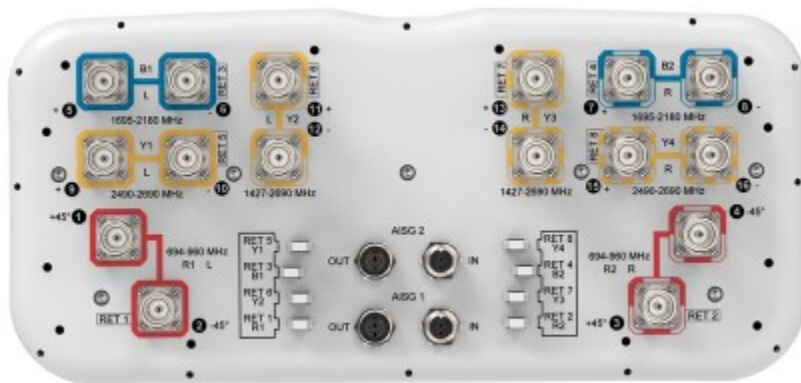
## Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxxxxxR2
B1	1695-2180	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxxxxxB1
B2	1695-2180	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxxxxxB2
Y1	2490-2690	9 - 10	65°	5	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1427-2690	11 - 12	65°	6	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1427-2690	13 - 14	65°	7	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	2490-2690	15 - 16	65°	8	AISG1	CPxxxxxxxxxxxxxxxxY4

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

## Port Configuration



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1427 – 2690 MHz   1695 – 2180 MHz   2490 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,200 W @ 50 °C

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## Electrical Specifications

	<b>R1,R2</b>	<b>R1,R2</b>	<b>R1,R2</b>	<b>B1,B2</b>	<b>B1,B2</b>	<b>Y1,Y4</b>
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>1695–1995</b>	<b>1920–2180</b>	<b>2490–2690</b>
<b>RF Port</b>	1-4	1-4	1-4	5-8	5-8	9,10,15,16
<b>Gain at Mid Tilt, dBi</b>	14.6	15.3	15.8	17.8	18.4	19.4
<b>Beamwidth, Horizontal, degrees</b>	73	63	57	71	68	63
<b>Beamwidth, Vertical, degrees</b>	10.4	9.5	8.7	5.6	5	4
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	17	18	16	15	18	17
<b>Front-to-Back Ratio at 180°, dB</b>	27	28	30	31	30	29
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	20	21	21	25	25	25
<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>	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	250	250	200

## Electrical Specifications

	<b>Y2,Y3</b>	<b>Y2,Y3</b>	<b>Y2,Y3</b>	<b>Y2,Y3</b>	<b>Y2,Y3</b>
<b>Frequency Band, MHz</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>	11-14	11-14	11-14	11-14	11-14
<b>Gain at Mid Tilt, dBi</b>	15.5	17.9	18.6	19.7	20.1
<b>Beamwidth, Horizontal, degrees</b>	81	64	62	57	53
<b>Beamwidth, Vertical, degrees</b>	7.4	5.8	5.2	4.4	4
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	14	18	19	15	17
<b>Front-to-Back Ratio at 180°, dB</b>	32	35	33	36	37
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	22	25	27	27	29
<b>Isolation, Cross Polarization,</b>	25	26	26	26	26

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dB					
Isolation, Inter-band, dB	25	26	26	26	26
VSWR   Return loss, dB	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	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200

## Mechanical Specifications

<b>BASTA Version, mechanical</b>	BASTA v12
<b>Wind Loading @ Velocity, frontal</b>	494.0 N @ 150 km/h (111.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	266.0 N @ 150 km/h (59.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	780.0 N @ 150 km/h (175.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	530 mm   20.866 in
<b>Depth, packed</b>	349 mm   13.74 in
<b>Length, packed</b>	2272 mm   89.449 in
<b>Weight, gross</b>	47 kg   103.617 lb

## Regulatory Compliance/Certifications

Agency	Classification
UK-ROHS	Compliant

## Included Products

BSAMNT-2F	–	Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.
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## \* Footnotes

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