

# RRZZHHTT65BR6MR



16-port sector antenna, 4x 694–960, 4x 1427–2690, 4x 1695–2180 and 4x 2490–2690 MHz, 65° HPBW, 6x RET

- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- New endcap designs provide improved wind loading performance
- All internal RET actuators are connected in “Cascaded MRET” configuration

## 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   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<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, high band</b>	0
<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

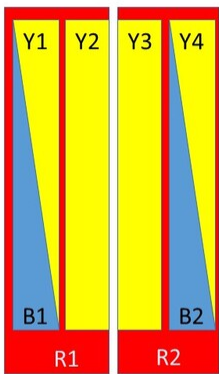
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (4)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Multi-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>	2100 mm   82.677 in
<b>Net Weight, antenna only</b>	42.3 kg   93.255 lb

## Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxxxR2
B1	1695-2180	5-6	3	CPxxxxxxxxxxxxxxxxB1
B2	1695-2180	7-8		
Y1	2490-2690	9-10	4	CPxxxxxxxxxxxxxxxxY1
Y4	2490-2690	15-16		
Y2	1427-2690	11-12	5	CPxxxxxxxxxxxxxxxxY2
Y3	1427-2690	13-14	6	CPxxxxxxxxxxxxxxxxY3

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

Left Right  
Bottom

## Port Configuration



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## 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>	900 W @ 50 °C

## Electrical Specifications

	<b>R1,R2</b>	<b>R1,R2</b>	<b>R1,R2</b>	<b>B1,B2</b>	<b>Y1,Y4</b>	<b>Y2,Y3</b>	<b>Y2,Y3</b>	<b>Y2,Y3</b>
<b>Frequency Band, MHz</b>	<b>694–790</b>	<b>790–890</b>	<b>890–960</b>	<b>1695–2180</b>	<b>2490–2690</b>	<b>1427–1518</b>	<b>1695–2180</b>	<b>2300–2690</b>
<b>RF Port</b>	1-4	1-4	1-4	5-8	9,10,15,16	11-14	11-14	11-14
<b>Gain, dBi</b>	14.9	15.4	15.6	18.1	18.6	15.1	17	17.5
<b>Beamwidth, Horizontal, degrees</b>	71	65	62	64	60	66	62	57
<b>Beamwidth, Vertical, degrees</b>	10.4	9.2	8.3	5.2	4.1	9.3	7.3	5.6
<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>	15	16	16	17	24	20	19	22
<b>Front-to-Back Ratio at 180°, dB</b>	32	33	31	33	29	33	35	32
<b>Isolation, Cross Polarization, dB</b>	28	28	28	28	28	26	27	26
<b>Isolation, Inter-band, dB</b>	28	28	28	28	28	27	27	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	300	300	250	150	250	250	200

## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.68 m <sup>2</sup>   7.319 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.21 m <sup>2</sup>   2.26 ft <sup>2</sup>
<b>Wind Loading @ Velocity, frontal</b>	720.0 N @ 150 km/h (161.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	220.0 N @ 150 km/h (49.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	864.0 N @ 150 km/h (194.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	496.0 N @ 150 km/h (111.5 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	288 km/h (179 mph)

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## 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>	2287 mm   90.039 in
<b>Weight, gross</b>	56.8 kg   125.222 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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