

# RZV-65B-R3



6-port sector antenna, 2x 694–960, 2x 1427–2690 and 2x 1695–2690 MHz, 65° HPBW, 3x 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

## 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>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>	4
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	6

## Remote Electrical Tilt (RET) Information

<b>RET Hardware</b>	CommRET v1
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (2)   Low band (1)
<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)

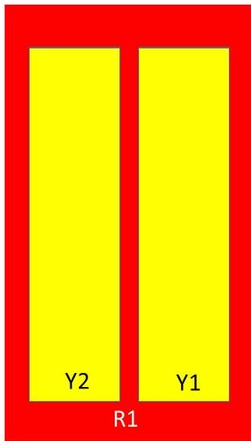
## Dimensions

<b>Width</b>	350 mm   13.78 in
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<b>Depth</b>	208 mm   8.189 in
<b>Length</b>	1828 mm   71.969 in
<b>Net Weight, without mounting kit</b>	23 kg   50.706 lb

## Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxxR1
Y1	1427-2690	3-4	2	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxxY2

Left Right  
Bottom Top (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>	1427 – 2690 MHz   1695 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	800 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	694–790	790–890	890–960	1427–1518	1695–1920	1920–2180	2300–2500	2500–2690
<b>Gain, dBi</b>	15.3	15.8	16	16.2	17.9	18.4	19	18.8
<b>Beamwidth, Horizontal, degrees</b>	67	65	62	67	61	61	59	60
<b>Beamwidth, Vertical, degrees</b>	12	10.7	9.8	7	5.9	5.2	4.6	4.3
<b>Beam Tilt, degrees</b>	2–14	2–14	2–14	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	16	17	16	21	17	16	16	14
<b>Front-to-Back Ratio at 180°, dB</b>	30	31	33	29	32	36	39	33
<b>Isolation, Cross Polarization, dB</b>	28	28	28	28	28	28	28	28
<b>Isolation, Inter-band, dB</b>	30	30	30	26	30	30	30	30
<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	250	250	200	200

## Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960	1427–1518	1695–1920	1920–2180	2300–2500	2500–2690
<b>Gain by all Beam Tilts, average, dBi</b>	15.1	15.6	15.9	15.9	17.5	18	18.7	18.3
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.3	±0.4	±0.3	±0.5	±0.7	±0.6	±0.4	±0.5
<b>Gain by Beam Tilt, average, dBi</b>	2° 15.1 8° 15.2 14° 14.9	2° 15.6 8° 15.8 14° 15.4	2° 15.9 8° 16.0 14° 15.5	2° 15.9 7° 15.9 12° 15.8	2° 17.3 7° 17.6 12° 17.4	2° 17.9 7° 18.2 12° 17.9	2° 18.6 7° 18.9 12° 18.4	2° 18.3 7° 18.5 12° 17.9
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±1.2	±1.8	±2.5	±7.5	±3.5	±2.2	±4.1	±4.8
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.8	±0.7	±0.6	±0.3	±0.5	±0.4	±0.3	±0.3
<b>USLS, beampeak to 20° above</b>	16	17	17	17	16	16	16	14

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## beampeak, dB

<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	24	24	24	23	27	27	29	28
<b>CPR at Boresight, dB</b>	19	20	23	16	19	22	22	21
<b>CPR at Sector, dB</b>	11	11	12	4	11	8	8	4

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	301.0 N @ 150 km/h (67.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	254.0 N @ 150 km/h (57.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	638.0 N @ 150 km/h (143.4 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>	456 mm   17.953 in
<b>Depth, packed</b>	357 mm   14.055 in
<b>Length, packed</b>	1975 mm   77.756 in
<b>Weight, gross</b>	36.5 kg   80.469 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CE	Compliant with the relevant CE product directives
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-3 – 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