

# RRV4-65B-R6H4-V3



12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x 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>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>	8
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	12

## 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>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (4)   Low band (2)
<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)

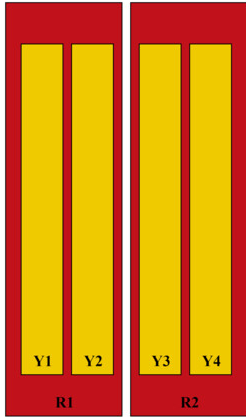
## Dimensions

<b>Width</b>	498 mm   19.606 in
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<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2000 mm   78.74 in
<b>Net Weight, antenna only</b>	32.4 kg   71.43 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12	6	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>	1695 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Electrical Specifications

# RRV4-65B-R6H4-V3

	R1,R2	R1,R2	R1,R2	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4
<b>Frequency Band, MHz</b>	<b>694–790</b>	<b>790–890</b>	<b>880–960</b>	<b>1695–1920</b>	<b>1920–2180</b>	<b>2300–2500</b>	<b>2500–2690</b>
<b>RF Port</b>	1-4	1-4	1-4	5-12	5-12	5-12	5-12
<b>Gain at Mid Tilt, dBi</b>	14.9	15.3	15.4	17.1	18.1	18.6	18.7
<b>Beamwidth, Horizontal, degrees</b>	70	65	65	70	63	57	56
<b>Beamwidth, Vertical, degrees</b>	10.7	9.4	8.8	6.3	5.7	5	4.8
<b>Beam Tilt, degrees</b>	2–14	2–14	2–14	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	16	15	15	17	18	22	21
<b>Front-to-Back Ratio at 180°, dB</b>	31	31	32	34	32	32	32
<b>Isolation, Cross Polarization, dB</b>	27	27	27	27	27	27	27
<b>Isolation, Inter-band, dB</b>	26	26	26	26	26	26	26
<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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	250	250	250	250

## Electrical Specifications, BASTA

	694–790	790–890	880–960	1695–1920	1920–2180	2300–2500	2500–2690
<b>Frequency Band, MHz</b>	<b>694–790</b>	<b>790–890</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>	14.8	15.1	15.2	17.1	18	18.5	18.5
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.7	±0.4	±0.7	±0.8	±0.7	±0.4	±0.5
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±7	±4	±5	±6	±8	±4	±4
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.8	±0.6	±0.7	±0.4	±0.4	±0.2	±0.2
<b>USLS, beampeak to 20° above beampeak, dB</b>	15	14	14	17	16	16	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	21	21	20	27	26	27	28
<b>CPR at Boresight, dB</b>	20	22	21	20	22	21	21
<b>CPR at Sector, dB</b>	12	8	7	10	8	7	4

## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.65 m <sup>2</sup>   6.997 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.2 m <sup>2</sup>   2.153 ft <sup>2</sup>

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<b>Wind Loading @ Velocity, frontal</b>	688.0 N @ 150 km/h (154.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	210.0 N @ 150 km/h (47.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	826.0 N @ 150 km/h (185.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	474.0 N @ 150 km/h (106.6 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>	318 mm   12.52 in
<b>Length, packed</b>	2121 mm   83.504 in
<b>Weight, gross</b>	44.5 kg   98.106 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



## 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.
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## \* Footnotes

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