

# RRV4-65B-R6H4VB-V2



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
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Dual 4T4R (4x MIMO) on High band
- Non-stacked high band array design provides higher gain and narrower vertical beamwidth than traditional antenna designs

## 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>Radiator Material</b>	Aluminum
<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

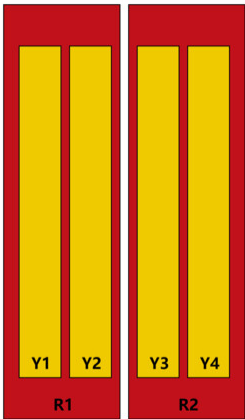
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (4)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

# RRV4-65B-R6H4VB-V2

## Dimensions

<b>Width</b>	499 mm   19.646 in
<b>Depth</b>	199 mm   7.835 in
<b>Length</b>	2100 mm   82.677 in
<b>Net Weight, antenna only</b>	37.1 kg   81.791 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	CPxxxxxxxxxxxxR1
R2	694-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxY2
Y3	1695-2690	9 - 10	65°	5	AISG1	CPxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12	65°	6	AISG1	CPxxxxxxxxxxxxY4

(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°

# RRV4-65B-R6H4VB-V2

Total Input Power, maximum 1,000 W

## Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4
<b>Frequency Band, MHz</b>	<b>694–806</b>	<b>790–890</b>	<b>880–960</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2400</b>	<b>2500–2690</b>
<b>RF Port</b>	1-4	1-4	1-4	5-12	5-12	5-12	5-12	5-12
<b>Gain, dBi</b>	15.7	16.1	16.3	16.9	17.1	17.2	17.6	18
<b>Beamwidth, Horizontal, degrees</b>	65	67	68	70	67	68	62	57
<b>Beamwidth, Vertical, degrees</b>	9.8	8.7	8	6.6	6.3	5.9	5.3	4.8
<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>	19	18	17	15	17	19	21	19
<b>Front-to-Back Ratio, Copolarization 180° ± 30°, dB</b>	27	29	29	26	27	27	27	27
<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, maximum, watts</b>	250	250	250	200	200	200	200	200

## Electrical Specifications, BASTA

	694–806	790–890	880–960	1695–1880	1850–1990	1920–2200	2300–2400	2500–2690
<b>Frequency Band, MHz</b>	<b>694–806</b>	<b>790–890</b>	<b>880–960</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2400</b>	<b>2500–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	15.3	15.9	16.1	16.4	16.7	16.8	17.1	17.4
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.6	±0.4	±0.4	±0.6	±0.6	±0.5	±0.5	±0.6
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±4	±4	±4	±11	±10	±7	±7	±6
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.8	±0.6	±0.5	±0.4	±0.3	±0.4	±0.2	±0.2
<b>CPR at Boresight, dB</b>	23	22	21	21	22	24	22	19

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	608.0 N @ 150 km/h (136.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	291.0 N @ 150 km/h (65.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	1,078.0 N @ 150 km/h (242.3 lbf @ 150 km/h)

# RRV4-65B-R6H4VB-V2

---

**Wind Speed, maximum** 200 km/h (124 mph)

## Packaging and Weights

**Width, packed** 570 mm | 22.441 in  
**Depth, packed** 275 mm | 10.827 in  
**Length, packed** 2375 mm | 93.504 in  
**Weight, gross** 48.4 kg | 106.704 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-B92-08 – 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