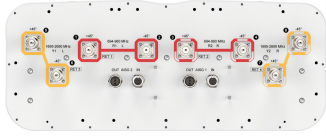


# RRVV-65B-R4-V4



8-port sector antenna, 4x 694–960 and 4x 1695–2690 MHz, 65° HPBW, 4x 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
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

## 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, mid band</b>	4
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	8

## 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 (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)

# RRVV-65B-R4-V4

## Dimensions

<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	1828 mm   71.969 in
<b>Net Weight, antenna only</b>	35.3 kg   77.823 lb

## Array Layout



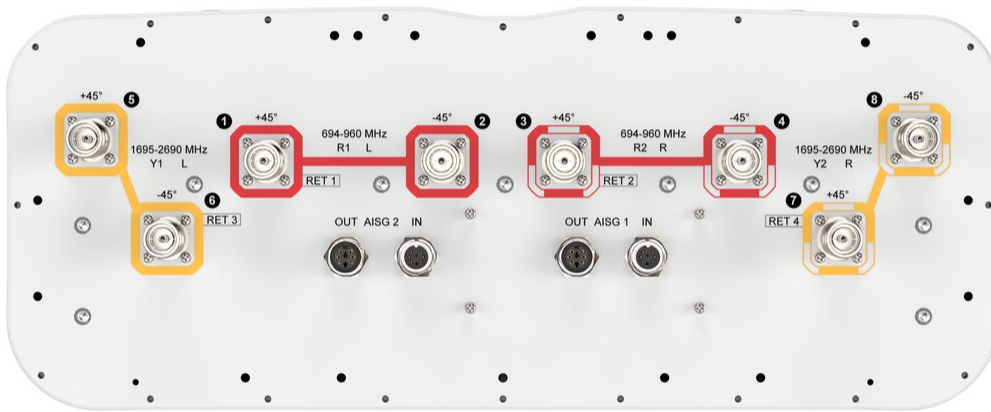
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7-8	4	CPxxxxxxxxxxxxxxxxY2

Left Bottom Right

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

## Port Configuration

# RRVV-65B-R4-V4



## 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

	R1,R2	R1,R2	R1,R2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
<b>Frequency Band, MHz</b>	<b>694–790</b>	<b>790–890</b>	<b>890–960</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2180</b>	<b>2300–2500</b>	<b>2500–2690</b>
<b>RF Port</b>	1-4	1-4	1-4	5-8	5-8	5-8	5-8	5-8
<b>Gain at Mid Tilt, dBi</b>	14.4	14.9	15.2	18.4	18.6	18.8	19.2	19.2
<b>Beamwidth, Horizontal,</b>	69	66	61	58	60	61	59	65

# RRVV-65B-R4-V4

degrees

<b>Beamwidth, Vertical, degrees</b>	11.7	10.5	9.7	5.5	5.2	5	4.4	4.1
<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>	17	18	17	19	20	22	23	22
<b>Front-to-Back Ratio at 180°, dB</b>	32	33	33	37	39	38	33	33
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	19	20	22	30	31	28	27	27
<b>Isolation, Cross Polarization, dB</b>	25	25	25	27	27	27	27	27
<b>Isolation, Inter-band, dB</b>	25	25	25	27	27	27	27	27
<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	250	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>694-790</b>	<b>790-890</b>	<b>890-960</b>	<b>1695-1880</b>	<b>1850-1990</b>	<b>1920-2180</b>	<b>2300-2500</b>	<b>2500-2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	14.3	14.7	15	18.2	18.5	18.7	19	18.9
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.4	±0.4	±0.6	±0.2	±0.3	±0.4	±0.4
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±4	±4	±4	±5	±2	±2	±5	±6
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.8	±0.8	±0.6	±0.4	±0.2	±0.3	±0.2	±0.1
<b>USLS, beampeak to 20° above beampeak, dB</b>	17	17	16	15	15	16	16	16
<b>CPR at Boresight, dB</b>	18	19	22	20	23	22	24	22
<b>CPR at Sector, dB</b>	6	5	7	8	9	8	7	3

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	711.0 N @ 150 km/h (159.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	229.0 N @ 150 km/h (51.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	998.0 N @ 150 km/h (224.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	563.0 N @ 150 km/h (126.6 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

# RRVV-65B-R4-V4

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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>	2015 mm   79.331 in
<b>Weight, gross</b>	49 kg   108.026 lb

## Regulatory Compliance/Certifications

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

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