

# RRVV-65D-R4VB



8-port sector antenna, 4x 694–960 and 4x 1695–2690 MHz, 65° HPBW, 4x RET

- Antenna with retractable tilt scale indicators and integrated pluggable 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>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>	4
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	8

## Remote Electrical Tilt (RET) Information

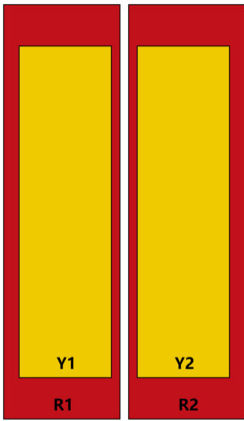
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (2)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state,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

# RRVV-65D-R4VB

## Dimensions

<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2497 mm   98.307 in
<b>Net Weight, antenna only</b>	38.2 kg   84.216 lb

## Array Layout

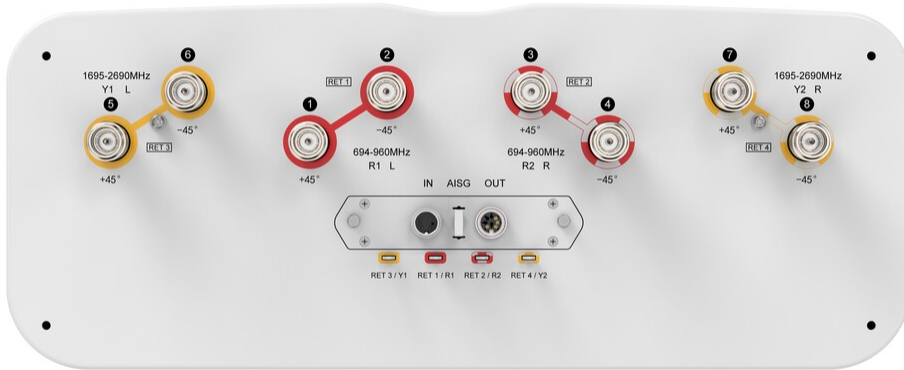


Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxR1
R2	694-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxY2

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

## Port Configuration

# RRVV-65D-R4VB



## 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>	1,000 W

## Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>1695–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>RF Port</b>	1-4	1-4	1-4	5-8	5-8	5-8	5-8
<b>Gain, dBi</b>	16.2	16.7	16.8	17.9	18.4	18.3	18
<b>Beamwidth, Horizontal, degrees</b>	68	61	57	65	59	59	59
<b>Beamwidth, Vertical, degrees</b>	8.8	7.9	7.2	5.1	4.5	4.1	3.9
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	16	17	18	18	18	15	16
<b>Front-to-Back Ratio, Copolarization 180° ± 30°, dB</b>	26	29	28	28	28	26	28

# RRVV-65D-R4VB

<b>Isolation, Cross Polarization, dB</b>	27	27	27	28	28	28	28
<b>Isolation, Inter-band, dB</b>	27	27	27	28	28	28	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153	-153
<b>Input Power per Port, maximum, watts</b>	250	250	250	200	170	170	170

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>1695–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	15.8	16.4	16.6	17.5	18.1	17.9	17.5
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.7	±0.4	±0.5	±0.7	±0.4	±0.5	±0.9
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±9	±3	±6	±7	±3	±4	±5
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.8	±0.5	±0.3	±0.4	±0.4	±0.2	±0.3
<b>CPR at Boresight, dB</b>	20	22	22	18	22	22	19

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	971.0 N @ 150 km/h (218.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	312.0 N @ 150 km/h (70.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,363.0 N @ 150 km/h (306.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	769.0 N @ 150 km/h (172.9 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	593 mm   23.346 in
<b>Depth, packed</b>	317 mm   12.48 in
<b>Length, packed</b>	2820 mm   111.024 in
<b>Weight, gross</b>	54 kg   119.049 lb

## Regulatory Compliance/Certifications

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

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## Included Products

- BSAMNT-B95-02 – 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, one middle bracket set and one bottom bracket set.

## \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance