

# RRVV-65B-R4VB-V2



8-port sector antenna, 4x 698–960 and 4x 1710–2690 MHz, 65°HPBW, 4x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Antenna with integrated pluggable RET
- 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

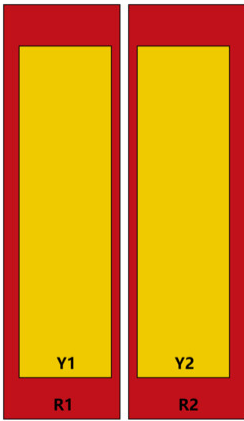
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (2)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state,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

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## Dimensions

<b>Width</b>	469 mm   18.465 in
<b>Depth</b>	198 mm   7.795 in
<b>Length</b>	2000 mm   78.74 in
<b>Net Weight, antenna only</b>	31.5 kg   69.446 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	698-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxR1
R2	698-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxR2
Y1	1710-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxY1
Y2	1710-2690	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxY2

(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>	1710 – 2690 MHz   698 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W

## Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	698–806	790–894	890–960	1710–1995	1920–2300	2300–2500	2490–2690
<b>RF Port</b>	1-4	1-4	1-4	5-8	5-8	5-8	5-8
<b>Gain, dBi</b>	14.8	15.2	15.4	17.4	17.4	17	17.3
<b>Beamwidth, Horizontal, degrees</b>	66	63	62	63	63	66	63
<b>Beamwidth, Vertical, degrees</b>	12.4	11.5	10.7	6.3	5.8	5.2	4.9
<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>	19	20	18	17	21	20	20
<b>Front-to-Back Ratio, Copolarization 180° ± 30°, dB</b>	28	28	29	29	29	29	26

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<b>Isolation, Cross Polarization, dB</b>	26	26	26	28	28	28	28
<b>Isolation, Inter-band, dB</b>	27	27	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port, maximum, watts</b>	250	250	250	200	200	200	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>1710–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	14.5	15.1	15.2	17	17	16.7	16.7
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.3	±0.2	±0.4	±0.4	±0.3	±0.7
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±4	±3	±4	±4	±6	±6	±8
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.7	±0.5	±0.6	±0.3	±0.5	±0.3	±0.2
<b>CPR at Boresight, dB</b>	20	21	20	23	23	21	20

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	536.0 N @ 150 km/h (120.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	287.0 N @ 150 km/h (64.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	569.0 N @ 150 km/h (127.9 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	200 km/h (124 mph)

## Packaging and Weights

<b>Width, packed</b>	540 mm   21.26 in
<b>Depth, packed</b>	275 mm   10.827 in
<b>Length, packed</b>	2207 mm   86.89 in
<b>Weight, gross</b>	42.5 kg   93.696 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>

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ROHS

Compliant

UK-ROHS

Compliant



## \* Footnotes

### **Performance Note**

Severe environmental conditions may degrade optimum performance