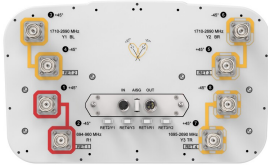


# RV2V-6533D-R4



8-port sector/multibeam antenna, 2x 694–960 MHz 65° HPBW, 2x 1695–2690 MHz 65° and 4x 1710–2690 MHz 4x 33° HPBW, 4x RET with tilt indicators

- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- All Internal RET actuators are connected in "Cascaded SRET" configuration

## General Specifications

<b>Antenna Type</b>	Multibeam
<b>Band</b>	Multiband
<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>	Copper   Low loss circuit board
<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>	6
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	8

## Remote Electrical Tilt (RET) Information

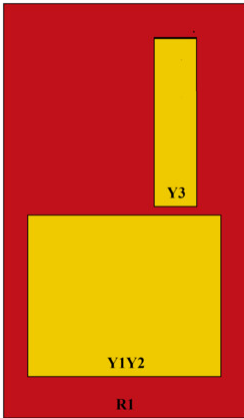
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (1)   Mid band (3)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state,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

## Dimensions

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<b>Width</b>	350 mm   13.78 in
<b>Depth</b>	208 mm   8.189 in
<b>Length</b>	2688 mm   105.827 in
<b>Net Weight, antenna only</b>	35 kg   77.162 lb

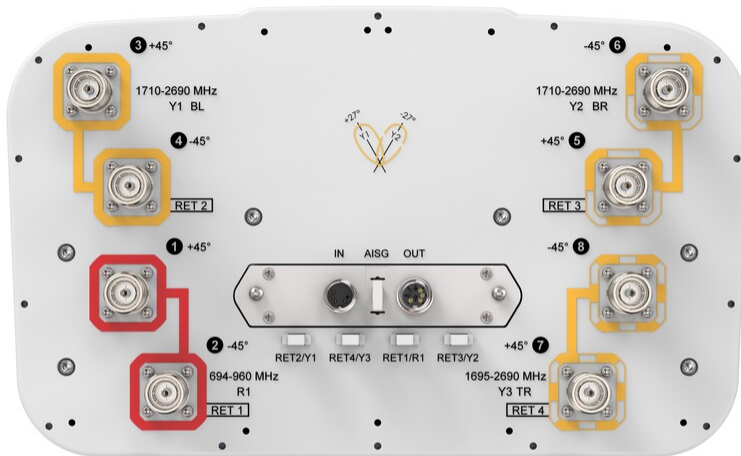
## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
Y1	1695-2690	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxY3

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

## Port Configuration



# RV2V-6533D-R4

## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2690 MHz   1710 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,000 W

## Electrical Specifications

	<b>R1</b>	<b>R1</b>	<b>R1</b>	<b>Y1-Y2</b>	<b>Y1-Y2</b>	<b>Y1-Y2</b>	<b>Y1-Y2</b>
<b>Frequency Band, MHz</b>	<b>694–790</b>	<b>790–890</b>	<b>880–960</b>	<b>1710–1880</b>	<b>1850–1990</b>	<b>1920–2170</b>	<b>2300–2400</b>
<b>RF Port</b>	1,2	1,2	1,2	3-6	3-6	3-6	3-6
<b>Beamwidth, Horizontal, degrees</b>	68	66	64	36	35	32	26
<b>Beamwidth, Vertical, degrees</b>	8.9	8.1	7.4	7.2	6.8	6.5	5.8
<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	19	17	17	17	17	18
<b>Front-to-Back Ratio at 180°, dB</b>	40	37	33	37	36	35	35
<b>Isolation, Cross Polarization, dB</b>	28	28	28	27	27	27	27
<b>Isolation, Inter-band, dB</b>	28	28	28	27	27	27	27
<b>Isolation, Beam to Beam, dB</b>				17	17	17	17
<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

<b>Frequency Band, MHz</b>	<b>694–790</b>	<b>790–890</b>	<b>880–960</b>	<b>1710–1880</b>	<b>1850–1990</b>	<b>1920–2170</b>	<b>2300–2400</b>
<b>Gain by all Beam Tilts, average, dBi</b>	16.2	16.6	16.8	17.5	18.6	19.2	19.8

## Electrical Specifications

	<b>Y1-Y2</b>	<b>Y3</b>	<b>Y3</b>	<b>Y3</b>	<b>Y3</b>
<b>Frequency Band, MHz</b>	<b>2490–2690</b>	<b>1695–1880</b>	<b>1920–2170</b>	<b>2300–2400</b>	<b>2490–2690</b>
<b>RF Port</b>	3-6	7,8	7,8	7,8	7,8
<b>Beamwidth, Horizontal, degrees</b>	25	60	65	65	63

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<b>Beamwidth, Vertical, degrees</b>	5.2	6.7	6	5.4	5
<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-12	2-12
<b>USLS (First Lobe), dB</b>	18	20	20	20	20
<b>Front-to-Back Ratio at 180°, dB</b>	33	33	36	38	37
<b>Isolation, Cross Polarization, dB</b>	27	27	27	27	27
<b>Isolation, Inter-band, dB</b>	27	27	27	27	27
<b>Isolation, Beam to Beam, dB</b>	17				
<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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	250	250	250

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>2490-2690</b>	<b>1695-1880</b>	<b>1920-2170</b>	<b>2300-2400</b>	<b>2490-2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	20	17	17.6	18.2	18.3

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	477.0 N @ 150 km/h (107.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	409.0 N @ 150 km/h (91.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,010.0 N @ 150 km/h (227.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	506.0 N @ 150 km/h (113.8 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	456 mm   17.953 in
<b>Depth, packed</b>	357 mm   14.055 in
<b>Length, packed</b>	2834 mm   111.575 in
<b>Weight, gross</b>	46.7 kg   102.956 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-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.

## \* Footnotes

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