

# RVV2VV-6533D-R7



14-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz 65° HPBW and 8x 1695–2690 MHz 4x 33° HPBW, 7x 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
- Enhances network capacity through twin six sectors on high band with only three antenna faces while maintaining low band coverage layer through three sectors

## 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>	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, high band</b>	12
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	14

## Remote Electrical Tilt (RET) Information

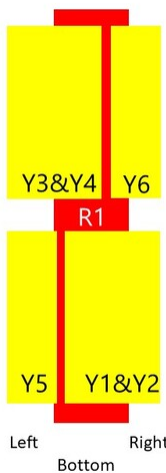
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (6)   Low band (1)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

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<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2688 mm   105.827 in
<b>Net Weight, antenna only</b>	54 kg   119.049 lb

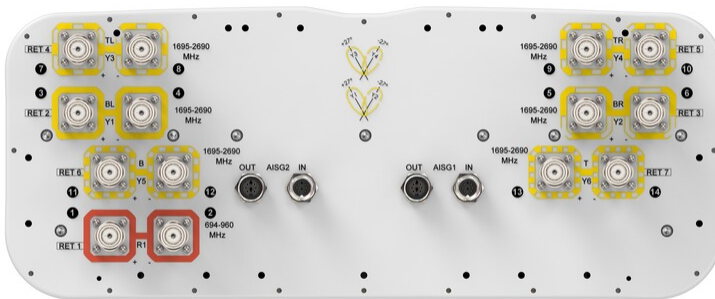
## Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxxR1
Y1	1695-2690	3-4	2	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	7-8	4	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	9-10	5	CPxxxxxxxxxxxxxxxxY4
Y5	1695-2690	11-12	6	CPxxxxxxxxxxxxxxxxY5
Y6	1695-2690	13-14	7	CPxxxxxxxxxxxxxxxxY6

(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

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<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,100 W

## Electrical Specifications

	<b>R1</b>	<b>R1</b>	<b>R1</b>	<b>Y1-Y4</b>	<b>Y1-Y4</b>	<b>Y1-Y4</b>	<b>Y5,Y6</b>	<b>Y5,Y6</b>	<b>Y5,Y6</b>
<b>Frequency Band, MHz</b>	<b>694-790</b>	<b>790-890</b>	<b>890-960</b>	<b>1695-1920</b>	<b>1920-2180</b>	<b>2300-2690</b>	<b>1695-1920</b>	<b>1920-2180</b>	<b>2300-2690</b>
<b>RF Port</b>	1,2	1,2	1,2	3-10	3-10	3-10	11-14	11-14	11-14
<b>Gain, dBi</b>	16.4	16.4	16.6	18.2	19.3	19.7	17.3	18.2	18.5
<b>Beamwidth, Horizontal, degrees</b>	63	65	61	34	31	25	67	64	61
<b>Beamwidth, Vertical, degrees</b>	8.7	7.8	7.2	7.5	6.7	5.6	6.2	5.6	4.7
<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
<b>USLS (First Lobe), dB</b>	15	17	17	16	17	17	16	15	16
<b>Front-to-Back Ratio at 180°, dB</b>	30	28	27	36	35	32	34	36	29
<b>Isolation, Cross Polarization, dB</b>	28	28	28	25	25	25	28	28	28
<b>Isolation, Inter-band, dB</b>	28	28	28	28	28	28	28	28	28
<b>Isolation, Beam to Beam, dB</b>				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	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	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	250	250	250	250	250	250

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>694-790</b>	<b>790-890</b>	<b>890-960</b>	<b>1695-1920</b>	<b>1920-2180</b>	<b>2300-2690</b>	<b>1695-1920</b>	<b>1920-2180</b>	<b>2300-2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	16.1	16.1	16.3	17.6	18.8	19.1	17	17.8	18.2
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.4	±0.4	±1.1	±0.8	±1	±0.5	±0.6	±0.4
<b>Gain by Beam Tilt, average, dBi</b>	2° 16.0 7° 16.2 12° 16.0	2° 16.0 7° 16.2 12° 16.1	2° 16.1 7° 16.4 12° 16.3	2° 17.6 7° 17.8 12° 17.5	2° 18.8 7° 19.1 12° 18.6	2° 19.0 7° 19.4 12° 18.9	2° 16.9 7° 17.1 12° 16.9	2° 17.8 7° 18.0 12° 17.6	2° 18.2 7° 18.4 12° 18.0
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±3	±3	±5	±4	±3	±2	±3	±5	±4
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.7	±0.5	±0.5	±0.4	±0.5	±0.4	±0.4	±0.4	±0.3

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<b>USLS, beampeak to 20° above beampeak, dB</b>	15	16	17	16	17	13	14	15	16
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	28	27	26	28	28	25	27	28	26
<b>CPR at Boresight, dB</b>	17	18	16	17	20	18	17	20	19
<b>CPR at Sector, dB</b>	10	10	9				11	11	8

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	1,070.0 N @ 150 km/h (240.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	375.0 N @ 150 km/h (84.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,385.0 N @ 150 km/h (311.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	880.0 N @ 150 km/h (197.8 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## 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>	2935 mm   115.551 in
<b>Weight, gross</b>	76.3 kg   168.213 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>
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

BSAMNT-4	-	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.
BSAMNT-M4	-	Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

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\* Footnotes

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