

# RR2VV-6533D-R6



12-port sector/multibeam antenna, 4x 698–960 MHz 65° HPBW and 8x 1710–2690 MHz 4x 33° HPBW, 6x 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 six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces

## 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>	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>	8
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	12

## 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>	High band (4)   Low 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)

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## Dimensions

<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>	52.6 kg   115.963 lb

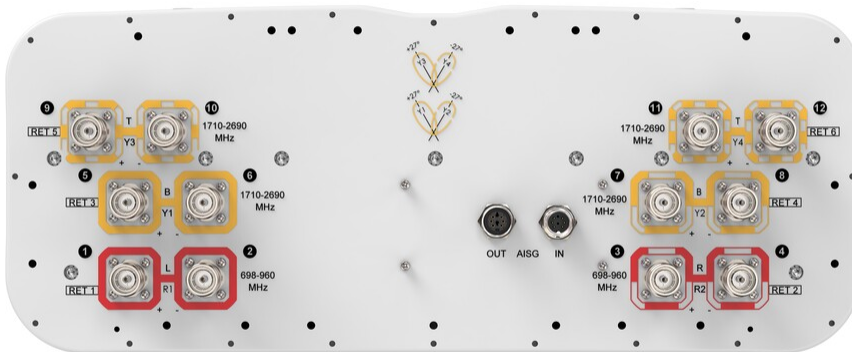
## Array Layout



RF Connector	Array ID	Frequency (MHz)	RET (SRET)	AISG RET UID
1 - 2	R1	698-960	1	CPxxxxxxxxxxxxxxxxR1
3 - 4	R2	698-960	2	CPxxxxxxxxxxxxxxxxR2
5 - 6	Y1	1710-2690	3	CPxxxxxxxxxxxxxxxxY1
7 - 8	Y2	1710-2690	4	CPxxxxxxxxxxxxxxxxY2
9 - 10	Y3	1710-2690	5	CPxxxxxxxxxxxxxxxxY3
11 - 12	Y4	1710-2690	6	CPxxxxxxxxxxxxxxxxY4

(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>	1,400 W

## Electrical Specifications

Frequency Band, MHz	698–790	790–890	890–960	1710–1880	1850–1990	1920–2180	2300–2500	2500–2690
<b>Gain, dBi</b>	15.7	16.1	16.5	18.3	19	19.5	19.8	19.8
<b>Beamwidth, Horizontal, degrees</b>	69	62	60	32	30	30	26	26
<b>Beamwidth, Vertical, degrees</b>	9.2	8.3	7.5	7.3	6.8	6.4	5.6	5.2
<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>	19	21	17	17	18	18	18	19
<b>Front-to-Back Ratio at 180°, dB</b>	29	28	31	36	36	36	33	32
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	25	25	25	25	25	25
<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	200	200	200	200	200

## Electrical Specifications, BASTA

Frequency Band, MHz	698–790	790–890	890–960	1710–1880	1850–1990	1920–2180	2300–2500	2500–2690
<b>Gain by all Beam Tilts, average, dBi</b>	15.4	15.9	16.2	17.6	18.5	18.9	19.4	19.3
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.4	±0.4	±1.3	±0.6	±0.7	±0.6	±0.6
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±6.2	±7.5	±5	±3.1	±1.4	±1.8	±1.5	±1.5
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.5	±0.5	±0.5	±0.5	±0.3	±0.5	±0.3	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	19	18	17	13	14	16	16	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	22	21	22	28	29	30	28	27

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<b>CPR at Boresight, dB</b>	23	24	24	18	20	22	23	22
<b>CPR at Sector, dB</b>	13	9	11					

## 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>	241.4 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>	75 kg   165.347 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



## 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.

## \* Footnotes

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