

# RVV2H-6533D-R5



10-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz 65° HPBW and 4x 1695–2180 MHz 2x 33° HPBW, 5x RET.

- 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>	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>	2
<b>RF Connector Quantity, total</b>	10

## 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 (4)   Low band (1)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions, maximum</b>	8 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

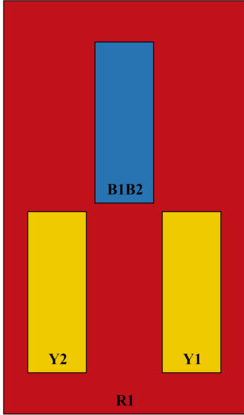
## Dimensions

<b>Width</b>	350 mm   13.78 in
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<b>Depth</b>	208 mm   8.189 in
<b>Length</b>	2688 mm   105.827 in
<b>Net Weight, without mounting kit</b>	35 kg   77.162 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
Y1	1695-2690	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxY2
B1	1695-2180	7 - 8	33°	4	AISG1	CPxxxxxxxxxxxxB1
B2	1695-2180	9 - 10	33°	5	AISG1	CPxxxxxxxxxxxxB2

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

## Port Configuration



## Electrical Specifications

<b>Impedance</b>	50 ohm
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<b>Operating Frequency Band</b>	1695 – 2180 MHz   1695 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,000 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	694–806	790–896	890–960	1695–1990	1920–2300	1695–1990	1920–2300
<b>Beamwidth, Horizontal, degrees</b>	68	66	64	32	30	61	62
<b>Beamwidth, Vertical, degrees</b>	8.4	7.6	7.1	7	6.6	7.3	6.5
<b>Beam Tilt, degrees</b>	0–10	0–10	0–10	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	16	17	15	15	15	18	17
<b>Front-to-Back Ratio at 180°, dB</b>	35	33	35	32	36	38	35
<b>Isolation, Cross Polarization, dB</b>	28	28	28	25	28	28	28
<b>Isolation, Inter-band, dB</b>	28	28	28	28	28	28	28
<b>Isolation, Beam to Beam, dB</b>				17	17		
<b>VSWR   Return loss, dB</b>	1.46   14.5	1.46   14.5	1.46   14.5	1.46   14.5	1.46   14.5	1.46   14.5	1.46   14.5
<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

Frequency Band, MHz	694–806	790–896	890–960	1695–1990	1920–2300	1695–1990	1920–2300
<b>Gain by all Beam Tilts, average, dBi</b>	16.4	16.6	16.7	17.9	18.8	16.4	16.9
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.3	±0.5	±1.2	±0.6	±0.7	±0.7
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±1.6	±2.2	±1.5	±2.4	±1.7	±3.2	±3.6
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.5	±0.4	±0.3	±0.5	±0.3	±0.6	±0.6
<b>USLS, beampeak to 20° above beampeak, dB</b>	16	17	15	15	15	13	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	27	26	25	25	28	28	27
<b>CPR at Boresight, dB</b>	16	17	17	19	20	22	21

## Electrical Specifications

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Frequency Band, MHz	2300–2500	2490–2690
Beamwidth, Horizontal, degrees	63	63
Beamwidth, Vertical, degrees	5.8	5.4
Beam Tilt, degrees	2–12	2–12
USLS (First Lobe), dB	16	16
Front-to-Back Ratio at 180°, dB	35	35
Isolation, Cross Polarization, dB	28	28
Isolation, Inter-band, dB	28	28
VSWR   Return loss, dB	1.46   14.5	1.46   14.5
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250

## Electrical Specifications, BASTA

Frequency Band, MHz	2300–2500	2490–2690
Gain by all Beam Tilts, average, dBi	17.5	17.4
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.8
Beamwidth, Horizontal Tolerance, degrees	±5.5	±3.8
Beamwidth, Vertical Tolerance, degrees	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	15	15
Front-to-Back Total Power at 180° ± 30°, dB	26	26
CPR at Boresight, dB	21	19

## Mechanical Specifications

Mechanical Tilt Range	0°–12°
Wind Loading @ Velocity, frontal	477.0 N @ 150 km/h (107.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	409.0 N @ 150 km/h (91.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,010.0 N @ 150 km/h (227.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	506.0 N @ 150 km/h (113.8 lbf @ 150 km/h)

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**Wind Speed, maximum** 241 km/h (150 mph)

## Packaging and Weights

**Width, packed** 460 mm | 18.11 in  
**Depth, packed** 350 mm | 13.78 in  
**Length, packed** 2830 mm | 111.417 in  
**Weight, gross** 48.6 kg | 107.145 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.

## \* Footnotes

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