

RVV2H-6533B-R5



10-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz 65° HPBW and 4x 1710–2400 MHz 2x 33° HPBW, 5x RET.

- All Internal RET actuators are connected in “Cascaded SRET” configuration

General Specifications

Antenna Type	Multibeam
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, low band	2
RF Connector Quantity, total	10

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male
Input Voltage	10–30 Vdc
Internal RET	High band (4) Low band (1)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

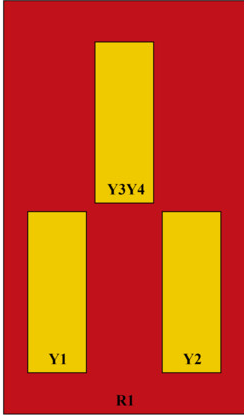
Dimensions

Width	350 mm 13.78 in
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Depth	208 mm 8.189 in
Length	1996 mm 78.583 in
Net Weight, without mounting kit	28.2 kg 62.17 lb

Array Layout

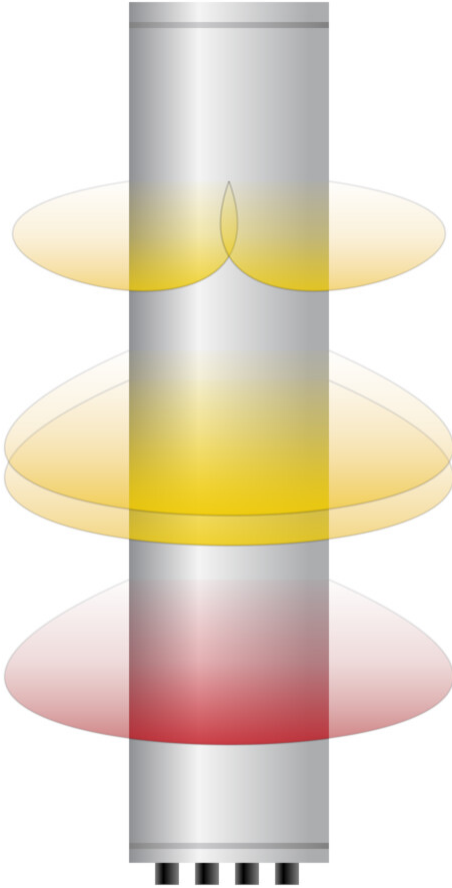


Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxxxR1
Y1	1695-2690	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1710-2400	7 - 8	33°	4	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1710-2400	9 - 10	33°	5	AISG1	CPxxxxxxxxxxxxxxxxY4

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

Beams Configuration

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Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 1710 – 2400 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W @ 50 °C

Electrical Specifications

	R1	R1	Y1-Y2	Y1-Y2	Y1-Y2	Y3-Y4	Y3-Y4	Y3-Y4
Frequency Band, MHz	694–790	790–960	1695–1920	1920–2180	2300–2690	1710–1880	1920–2180	2300–2400
Gain, dBi	15	15.3	16.6	17	17.3	16.4	17.8	18
Beam Centers, Horizontal, degrees						±27	±27	±27
Beamwidth, Horizontal, degrees	68	66	62	63	66	33	31	27
Beamwidth, Vertical, degrees	11.9	10.5	8.9	8	6.6	10.2	9.2	8.3
Beam Tilt, degrees	2–14	2–14	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	21	20	18	18	20	20	21	24
Front-to-Back Ratio at 180°, dB	31	32	36	36	30	28	35	35
Isolation, Cross Polarization,	28	28	26	26	26	25	25	25

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dB

Isolation, Inter-band, dB	28	28	28	28	28	28	28	28
VSWR Return loss, dB	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	1.46 14.5
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	250	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–960	1695–1920	1920–2180	2300–2690	1710–1880	1920–2180	2300–2400
Gain by all Beam Tilts, average, dBi	14.8	15.1	16.1	16.7	16.8	15.9	17.4	17.5
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.4	±0.6	±0.4	±0.5	±0.9	±0.6	±1.5
Gain by Beam Tilt, average, dBi	2° 14.8 8° 14.8 14° 14.6	2° 15.2 8° 15.1 14° 14.8	2° 16.1 7° 16.2 12° 16.1	2° 16.5 7° 16.7 12° 16.7	2° 16.6 7° 17.0 12° 16.7	2° 15.9 7° 16.0 12° 15.7	2° 17.2 7° 17.5 12° 17.2	2° 17.5 7° 17.7 12° 16.9
Beamwidth, Horizontal Tolerance, degrees	±1.5	±1.9	±3.3	±3.7	±5	±1.5	±1.6	±0.9
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.8	±0.7	±0.6	±0.5	±0.5	±0.5	±0.3
USLS, beampeak to 20° above beampeak, dB	21	15	16	18	14	20	19	19
Front-to-Back Total Power at 180° ± 30°, dB	25	24	29	26	25	22	28	27
CPR at Boresight, dB	17	17	18	21	16	18	20	15
CPR at Sector, dB	10	9	13	12	7			
CPR at 10 dB Horizontal Beamwidth, dB						7	11	7

Mechanical Specifications

Mechanical Tilt Range	0°–12°
Wind Loading @ Velocity, frontal	334.0 N @ 150 km/h (75.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	282.0 N @ 150 km/h (63.4 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	708.0 N @ 150 km/h (159.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	354.0 N @ 150 km/h (79.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	456 mm 17.953 in
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Depth, packed	357 mm 14.055 in
Length, packed	2136 mm 84.095 in
Weight, gross	42.2 kg 93.035 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



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
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