

RVV-33B-R3



6-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz, 33° HPBW, 3x RET

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

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light Gray (RAL 7035)
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
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	6

Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	Low band (1) Mid band (2)
Power Consumption, active state, maximum	13 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

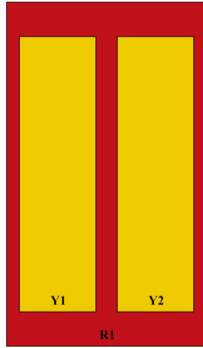
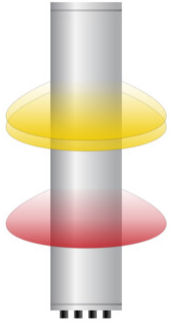
Width	640 mm 25.197 in
Depth	235 mm 9.252 in

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Length 1830 mm | 72.047 in

Net Weight, antenna only 44 kg | 97.003 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	ANxxxxxxxxxxxxx1
Y1	1695-2690	3 - 4	2	AISG1	ANxxxxxxxxxxxxx2
Y2	1695-2690	5 - 6	3	AISG1	ANxxxxxxxxxxxxx3

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2690 MHz | 694 – 960 MHz

Polarization $\pm 45^\circ$

Total Input Power, maximum 900 W @ 50 °C

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Electrical Specifications

	R1	R1	R1	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	698–806	790–896	890–960	1695–1990	1920–2300	2300–2500	2490–2690
RF Port	1,2	1,2	1,2	3,4,5,6	3,4,5,6	3,4,5,6	3,4,5,6
Gain at Mid Tilt, dBi	17.5	18.2	18.6	19.8	20.5	21.3	21.3
Beamwidth, Horizontal, degrees	36	32	30	34	33	28	26
Beamwidth, Vertical, degrees	12.4	11.2	10.5	5.6	5	4.5	4.2
Beam Tilt, degrees	2–13	2–13	2–13	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	20	20	20	19	20	17	18
Front-to-Back Ratio at 180°, dB	33	36	35	35	35	34	35
Isolation, Cross Polarization, dB	28	26	26	28	28	28	28
Isolation, Inter-band, dB	30	30	30	30	30	30	30
VSWR Return loss, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	300	200	200	200	200

Electrical Specifications, BASTA

	698–806	790–896	890–960	1695–1990	1920–2300	2300–2500	2490–2690
Frequency Band, MHz	698–806	790–896	890–960	1695–1990	1920–2300	2300–2500	2490–2690
Gain by all Beam Tilts, average, dBi	17.4	18.1	18.5	19.7	20.4	21.2	21.1
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.3	±0.4	±0.7	±0.7	±0.5	±0.7
Beamwidth, Horizontal Tolerance, degrees	±3	±1	±1	±1	±3	±2	±1
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.7	±0.4	±0.4	±0.4	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	20	20	19	18	19	17	17
Front-to-Back Total Power at 180° ± 30°, dB	28	28	27	29	28	29	29
CPR at Boresight, dB	20	19	18	20	20	20	22
CPR at 10 dB Horizontal Beamwidth, dB	9.4	9.4	16.6	13.6	14.2	12	11

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Mechanical Specifications

Wind Loading @ Velocity, frontal	764.0 N @ 150 km/h (171.8 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	254.0 N @ 150 km/h (57.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,148.0 N @ 150 km/h (258.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	785.0 N @ 150 km/h (176.5 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	752 mm 29.606 in
Depth, packed	387 mm 15.236 in
Length, packed	1982 mm 78.032 in
Weight, gross	66.4 kg 146.387 lb

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
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-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.
BSAMNT-M	-	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
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