

RRVV-33B-R2

8-port multiband sector antenna, 4x 694-960 and 4 x 1695-2690 MHz, 33° HPBW, 2x RET



- Ideal for high gain corridor coverage or capacity optimization
- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Mid band

General Specifications

Antenna Type	Sector
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	4
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
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 (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	749 mm 29.488 in
Depth	197 mm 7.756 in

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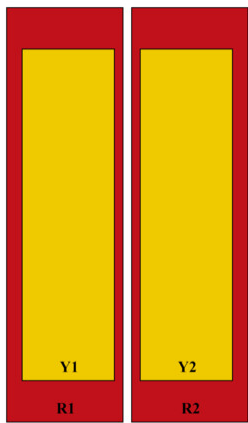
Length

2225 mm | 87.598 in

Net Weight, antenna only

55.6 kg | 122.577 lb

Array Layout



The diagram illustrates the physical layout of the antenna arrays. It shows two vertical red rectangular sections labeled R1 and R2 at the bottom. Inside each red section is a larger yellow rectangular area. The yellow area in R1 is labeled Y1, and the yellow area in R2 is labeled Y2.

Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxR1
R2	694-960	3 - 4			
Y1	1695-2690	5 - 6	2	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8			

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

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	698–806	790–894	890–960	1695–1995	1920–2300	2300–2500	2490–2690
RF Port	1-4	1-4	1-4	5-8	5-8	5-8	5-8
Gain, dBi	17.1	18	18.6	21.1	22.3	22.8	22.5
Beamwidth, Horizontal,	37	33	31	28	25	24	21

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degrees							
Beamwidth, Vertical, degrees	9.9	8.9	8.2	5.8	5.1	4.5	4.3
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	15	18	19	20	20	20	19
Front-to-Back Ratio at 180°, dB	30	35	36	38	39	39	34
CPR at Boresight, dB	20	19	21	22	17	15	17
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25
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	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	200	200	200	200

Mechanical Specifications

Wind Loading @ Velocity, frontal	2,165.0 N @ 150 km/h (486.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	239.0 N @ 150 km/h (53.7 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	2,165.0 N @ 150 km/h (486.7 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	2,165.0 N @ 150 km/h (486.7 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	910 mm 35.827 in
Depth, packed	368 mm 14.488 in
Length, packed	2723 mm 107.205 in
Weight, gross	82.1 kg 180.999 lb

Regulatory Compliance/Certifications

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

Included Products

BSAMNT-9	–	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.
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* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance