

# 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

<b>Antenna Type</b>	Sector
<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>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	4
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	8

## 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>	Low band (1)   Mid band (1)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

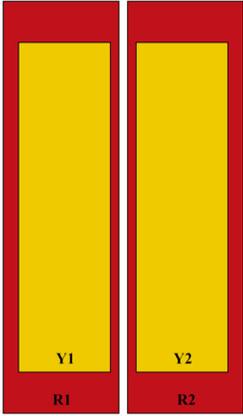
<b>Width</b>	749 mm   29.488 in
<b>Depth</b>	197 mm   7.756 in

# RRVV-33B-R2

**Length** 2225 mm | 87.598 in

**Net Weight, antenna only** 55.6 kg | 122.577 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4			
Y1	1695-2690	5 - 6	2	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8			

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

## Port Configuration

# RRVV-33B-R2



## Electrical Specifications

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

## Electrical Specifications

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

# RRVV-33B-R2

## degrees

<b>Beamwidth, Vertical, degrees</b>	9.9	8.9	8.2	5.8	5.1	4.5	4.3
<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-12	2-12	2-12	2-12
<b>USLS (First Lobe), dB</b>	15	18	19	20	20	20	19
<b>Front-to-Back Ratio at 180°, dB</b>	30	35	36	38	39	39	34
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	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
<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	200	200	200	200

## Mechanical Specifications

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

## Packaging and Weights

<b>Width, packed</b>	910 mm   35.827 in
<b>Depth, packed</b>	368 mm   14.488 in
<b>Length, packed</b>	2723 mm   107.205 in
<b>Weight, gross</b>	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.
----------	---	--

# RRVV-33B-R2

---

\* Footnotes

**Performance Note**

Severe environmental conditions may degrade optimum performance