

# RRVV-65A-R2N43



8-port sector antenna, 4 x 694–960 and 4 x 1695–2690 MHz, 65° HPBW, 2x RET

- Antenna design optimized to offer high gain performances
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Mid band
- Antenna shape optimized for wind load reduction

## 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

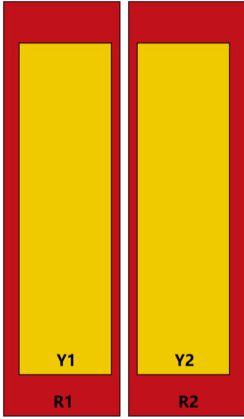
<b>Width</b>	430 mm   16.929 in
<b>Depth</b>	197 mm   7.756 in

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**Length** 1599 mm | 62.953 in

**Net Weight, antenna only** 24.5 kg | 54.013 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

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## 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>Frequency Band, MHz</b>	<b>703–803</b>	<b>824–894</b>	<b>890–960</b>
<b>RF Port</b>	1-4	1-4	1-4
<b>Gain, dBi</b>	14.3	14.9	15.1
<b>Beamwidth, Horizontal,</b>	70	70	67

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degrees

<b>Beamwidth, Vertical, degrees</b>	13.4	11.8	11.1
<b>Beam Tilt, degrees</b>	2-14	2-14	2-14
<b>USLS (First Lobe), dB</b>	16	18	18
<b>Front-to-Back Ratio at 180°, dB</b>	29	27	28
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	19	19	19
<b>Isolation, Cross Polarization, typical, dB</b>	25	25	25
<b>Isolation, Inter-band, typical, dB</b>	25	25	25
<b>VSWR   Return loss, dB</b>	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
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300

## Electrical Specifications

	<b>Y1,Y2</b>	<b>Y1,Y2</b>	<b>Y1,Y2</b>	<b>Y1,Y2</b>	<b>Y1,Y2</b>
<b>Frequency Band, MHz</b>	<b>1695-1920</b>	<b>1850-1990</b>	<b>2100-2170</b>	<b>2300-2500</b>	<b>2500-2690</b>
<b>RF Port</b>	5-8	5-8	5-8	5-8	5-8
<b>Gain, dBi</b>	18.1	18.5	18.9	19.5	19.3
<b>Beamwidth, Horizontal, degrees</b>	62	58	59	50	53
<b>Beamwidth, Vertical, degrees</b>	5.9	5.6	5.2	4.7	4.4
<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-12	2-12
<b>USLS (First Lobe), dB</b>	17	18	19	19	19
<b>Front-to-Back Ratio at 180°, dB</b>	34	34	38	34	31
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	28	28	30	27	26
<b>Isolation, Cross Polarization, dB</b>	26	26	26	26	26
<b>Isolation, Inter-band, dB</b>	26	26	26	26	26
<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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	250	200	200

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## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	370.0 N @ 150 km/h (83.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	186.0 N @ 150 km/h (41.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	557.0 N @ 150 km/h (125.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	237.0 N @ 150 km/h (53.3 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	530 mm   20.866 in
<b>Depth, packed</b>	349 mm   13.74 in
<b>Length, packed</b>	1771 mm   69.724 in
<b>Weight, gross</b>	34.5 kg   76.059 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
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.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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