

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

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	430 mm 16.929 in
Depth	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

Y1

R1

Y2

R2

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

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degrees			
Beamwidth, Vertical, degrees	13.4	11.8	11.1
Beam Tilt, degrees	2–14	2–14	2–14
USLS (First Lobe), dB	16	18	18
Front-to-Back Ratio at 180°, dB	29	27	28
Front-to-Back Total Power at 180° ± 30°, dB	19	19	19
CPR at Boresight, dB	17	17	20
Isolation, Cross Polarization, typical, dB	25	25	25
Isolation, Inter-band, typical, dB	25	25	25
VSWR Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300

Electrical Specifications

	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	1695–1920	1850–1990	2100–2170	2300–2500	2500–2690
RF Port	5-8	5-8	5-8	5-8	5-8
Gain, dBi	18.1	18.5	18.9	19.5	19.3
Beamwidth, Horizontal, degrees	62	58	59	50	53
Beamwidth, Vertical, degrees	5.9	5.6	5.2	4.7	4.4
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	18	19	19	19
Front-to-Back Ratio at 180°, dB	34	34	38	34	31
Front-to-Back Total Power at 180° ± 30°, dB	28	28	30	27	26
CPR at Boresight, dB	20	22	19	22	18
Isolation, Cross Polarization, dB	26	26	26	26	26
Isolation, Inter-band, dB	26	26	26	26	26
VSWR Return loss, dB	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

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Input Power per Port at 50°C, maximum, watts	250	250	250	200	200
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Mechanical Specifications

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

Packaging and Weights

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

Regulatory Compliance/Certifications

Agency	Classification
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

Performance Note	Severe environmental conditions may degrade optimum performance
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