

RRVV-85D-R4N43



8-port sector antenna, 4x 694–960 and 4x 1695–2690 MHz, 85° HPBW, 4x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Antenna shape optimized for wind load reduction

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
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	0
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	2 female 2 male
Input Voltage	10–30 Vdc
Internal RET	Low band (2) Mid band (2)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0

Dimensions

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Width	430 mm 16.929 in
Depth	197 mm 7.756 in
Length	2769 mm 109.016 in
Net Weight, antenna only	38.9 kg 85.76 lb

Array Layout

Y1

R1

Y2

R2

Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	85°	1	AISG1	CPxxxxxxxxxxxxR1
R2	694-960	3 - 4	85°	2	AISG1	CPxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	85°	3	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	85°	4	AISG1	CPxxxxxxxxxxxxY2

(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

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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 at Mid Tilt, dBi	15.6	16.2	16.6	16.9	17.4	17.8	18
Beamwidth, Horizontal, degrees	86	80	75	87	87	77	71
Beamwidth, Vertical, degrees	8.2	7.5	7	5.5	4.9	4.4	4.2
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	22	18	15	15	16	15
Front-to-Back Ratio at 180°, dB	31	34	32	27	27	28	35
CPR at Boresight, dB	22	22	21	17	17	19	16
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	250	250	200	200

Mechanical Specifications

Wind Loading @ Velocity, frontal	680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	347.0 N @ 150 km/h (78.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,020.0 N @ 150 km/h (229.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	434.0 N @ 150 km/h (97.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	511 mm 20.118 in
Depth, packed	318 mm 12.52 in
Length, packed	2890 mm 113.78 in
Weight, gross	59 kg 130.073 lb

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Regulatory Compliance/Certifications

Agency	Classification
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-4	-	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-M4	-	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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