

RR2VV-6533AR6VB-V2



12-port sector/multibeam antenna, 4x 698–960 MHz 65° HPBW and 8x 1710–2690 MHz 4x 33°HPBW, 6x RET

- **Reliable Performance:** The hybrid twin-beam design ensures perfectly symmetrical arrays within the antenna, delivering consistent pattern performance across all ports. Optimized for 4T4R (4x MIMO) configurations, it maintains dependable functionality across the entire band for both sector and twin-beam applications
- **Improved Network Efficiency:** Designed for six-sector deployment in the mid-band, it enhances network capacity and optimizes spectrum usage
- **Flexible Configuration:** Features an integrated pluggable RET and retractable tilt scale indicators, enabling precise and versatile adjustments

General Specifications

Antenna Type	Multibeam
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
Radiator Material	Aluminum Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

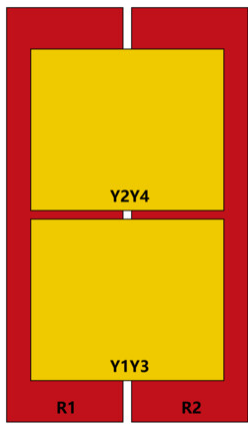
Remote Electrical Tilt (RET) Information

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 (2) Mid band (4)
Power Consumption, active state, maximum	10 W

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Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)
Dimensions	
Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	1597 mm 62.874 in
Net Weight, antenna only	24.3 kg 53.572 lb

Array Layout

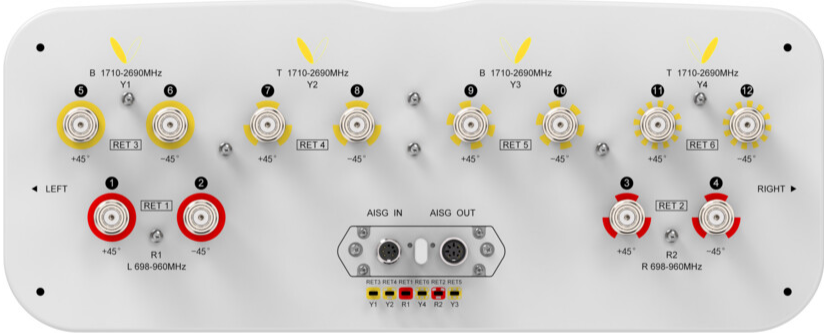


Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	RET UID
R1	698-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxR1
R2	698-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxR2
Y1	1710-2690	5 - 6	33°	3	AISG1	CPxxxxxxxxxxxxY1
Y2	1710-2690	7 - 8	33°	4	AISG1	CPxxxxxxxxxxxxY2
Y3	1710-2690	9 - 10	33°	5	AISG1	CPxxxxxxxxxxxxY3
Y4	1710-2690	11 - 12	33°	6	AISG1	CPxxxxxxxxxxxxY4

(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	1710 – 2690 MHz 698 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4
Frequency Band, MHz	698–803	824–894	880–960	1710–1990	1920–2170	2300–2500	2490–2690
RF Port	1-4	1-4	1-4	5-12	5-12	5-12	5-12
Gain, dBi	14.3	14.7	15.2	17	17.7	17.9	17.9
Beam Centers, Horizontal, degrees				±27	±27	±27	±27
Beamwidth, Horizontal, degrees	64	61	59	32	29	27	26
Beamwidth, Vertical, degrees	12	10.9	9.7	10.7	9.4	8.3	8
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	15	15	16	17	17	17	16
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	23	23	23	24	28	29	27

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Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25
Isolation, Beam to Beam, dB				15	15	15	15
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	-150	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	300	300	300	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	698-803	824-894	880-960	1710-1990	1920-2170	2300-2500	2490-2690
Gain by all Beam Tilts, average, dBi	14.1	14.5	15	16.8	17.5	17.7	17.7
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.5	±1.2	±0.9	±0.8	±1.1
Beamwidth, Horizontal Tolerance, degrees	±9	±7	±7	±3	±2	±2	±2
Beamwidth, Vertical Tolerance, degrees	±1	±1	±0.8	±0.8	±0.9	±0.8	±0.7
CPR at Boresight, dB	20	26	24	17	19	18	15

Mechanical Specifications

Wind Loading @ Velocity, frontal	589.0 N @ 150 km/h (132.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	197.0 N @ 150 km/h (44.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	485.0 N @ 150 km/h (109.0 lbf @ 150 km/h)
Wind Speed, maximum	200 km/h (124 mph)

Packaging and Weights

Width, packed	573 mm 22.559 in
Depth, packed	272 mm 10.709 in
Length, packed	1817 mm 71.535 in
Weight, gross	33.2 kg 73.193 lb

Regulatory Compliance/Certifications

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

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* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

