

RR2VV-6533B-R6



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

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces

General Specifications

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

Remote Electrical Tilt (RET) Information

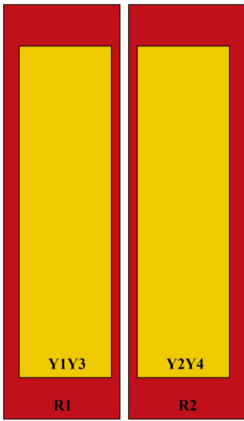
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male
Input Voltage	10–30 Vdc
Internal RET	High band (4) Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

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Dimensions

Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	2100 mm 82.677 in
Net Weight, without mounting kit	43 kg 94.799 lb

Array Layout

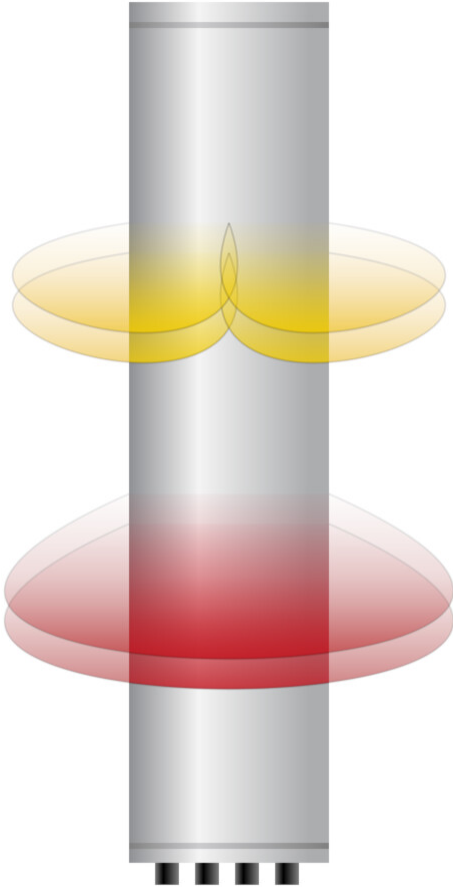


Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	65°	1	AISG1	ANxxxxxxxxxxxxx1
R2	694-960	3 - 4	65°	2	AISG1	ANxxxxxxxxxxxxx2
Y1	1695-2690	5 - 6	33°	3	AISG1	ANxxxxxxxxxxxxx3
Y2	1695-2690	7 - 8	33°	4	AISG1	ANxxxxxxxxxxxxx4
Y3	1695-2690	9 - 10	33°	5	AISG1	ANxxxxxxxxxxxxx5
Y4	1695-2690	11 - 12	33°	6	AISG1	ANxxxxxxxxxxxxx6

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

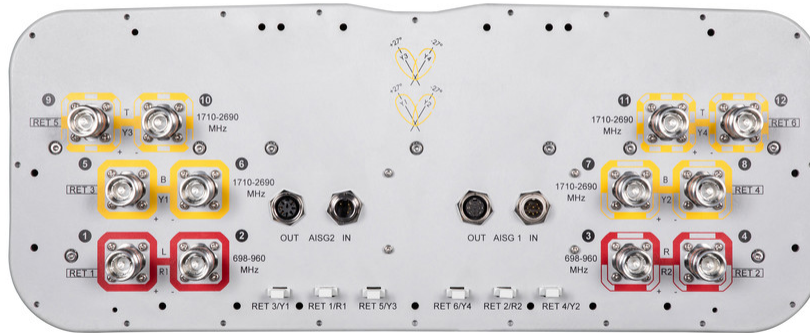
Beams Configuration

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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 @ 50 °C

Electrical Specifications

Frequency Band, MHz	698–803	824–880	880–960	1710–1880	1920–2170	2300–2490	2490–2690
Gain, dBi	15.1	15.4	15.5	17.4	18.9	19	19.5
Beam Centers, Horizontal, degrees				±27	±25	±24	±22
Beamwidth, Horizontal, degrees	70	64	61	32	29	27	24
Beamwidth, Vertical, degrees	10.9	9.7	9.1	8.9	7.9	6.8	6.4
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	18	18	18	20	19	19
Front-to-Back Ratio at 180°, dB	30	30	34	34	36	34	33
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	29	28	29	29	31	30	30

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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				17	17	17	17
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	400	400	400	250	250	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	698–803	824–880	880–960	1710–1880	1920–2170	2300–2490	2490–2690
Gain by all Beam Tilts, average, dBi	14.7	15.1	15.3	16.7	18.4	18.4	19.1
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.3	±0.3	±1.2	±0.7	±1.6	±0.8
Gain by Beam Tilt, average, dBi	2° 14.8 7° 14.8 12° 14.6	2° 15.2 7° 15.2 12° 14.9	2° 15.4 7° 15.4 12° 15.0	2° 16.8 7° 16.8 12° 15.5	2° 18.4 7° 18.5 12° 18.1	2° 18.5 7° 18.6 12° 18.0	2° 19.1 7° 19.3 12° 18.7
Beamwidth, Horizontal Tolerance, degrees	±6.1	±5.1	±3.3	±3.1	±1.4	±2.8	±1.2
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.4	±0.6	±0.6	±0.5	±0.4	±0.5
USLS, beampeak to 20° above beampeak, dB	17	16	16	13	16	16	15
Front-to-Back Total Power at 180° ± 30°, dB	21	22	23	28	29	28	28
CPR at Boresight, dB	21	21	18	16	20	16	22
CPR at Sector, dB	11	8	12				
CPR at 10 dB Horizontal Beamwidth, dB				3	9	9	11

Mechanical Specifications

Wind Loading @ Velocity, frontal	803.0 N @ 150 km/h (180.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	275.0 N @ 150 km/h (61.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,040.0 N @ 150 km/h (233.8 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	661.0 N @ 150 km/h (148.6 lbf @ 150 km/h)
Wind Speed, maximum	241.402 km/h 150 mph

Packaging and Weights

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Width, packed	608 mm 23.937 in
Depth, packed	352 mm 13.858 in
Length, packed	2282 mm 89.843 in
Weight, gross	57.4 kg 126.545 lb

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



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.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance