

RRZZ2VV-6533B-R8



16-port sector/multibeam antenna 4x 694–960 MHz, 4x 1427–2690 MHz 65° HPBW and 8x 1710–2690 MHz 2x 2-Beam 33°HPBW, 8x RET

- GREEN and High Capacity Antenna Solution
- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces
- Innovative aerodynamic shape optimized for reduced wind loading in every direction
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- "Green" packaging of reduced size and gross weight that uses less material and reduces shipping pollution

General Specifications

Antenna Type	DualPol® 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	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	12
RF Connector Quantity, mid band	0
RF Connector Quantity, low band	4
RF Connector Quantity, total	16

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 (6) Low band (2)

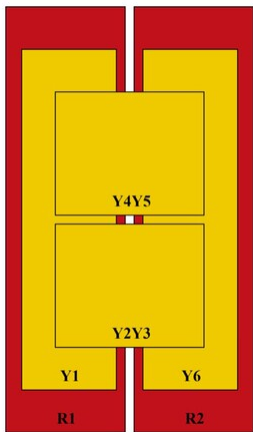
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Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	2100 mm 82.677 in
Net Weight, antenna only	46 kg 101.413 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	694-960	1 - 2	1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	CPxxxxxxxxxxxxxxxxR2
Y1	1427-2690	5 - 6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1710-2690	7 - 8	4	CPxxxxxxxxxxxxxxxxY2
Y3	1710-2690	9 - 10	5	CPxxxxxxxxxxxxxxxxY3
Y4	1710-2690	11 - 12	6	CPxxxxxxxxxxxxxxxxY4
Y5	1710-2690	13 - 14	7	CPxxxxxxxxxxxxxxxxY5
Y6	1427-2690	15 - 16	8	CPxxxxxxxxxxxxxxxxY6

(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	1427 – 2690 MHz 1710 – 2690 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,700 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1,Y6	Y1,Y6	Y1,Y6	Y1,Y6	Y1,Y6
Frequency Band, MHz	694–806	790–896	890–960	1427–1518	1695–1990	1920–2300	2300–2500	2490–2690
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	5,6,15,16	5,6,15,16	5,6,15,16	5,6,15,16	5,6,15,16
Gain at Mid Tilt, dBi	14.3	14.7	14.7	14.4	15.9	16.9	18	17.9
Beam Centers, Horizontal, degrees	±0	±0	±0	±0	±0	±0	±0	±0
Beamwidth, Horizontal, degrees	73	66	66	78	76	68	58	56
Beamwidth,	10.9	9.7	9.1	7.9	6.6	5.9	5.2	4.9

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Vertical, degrees									
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	17	17	19	18	19	21	21	
Front-to-Back Ratio at 180°, dB	27	30	29	33	33	31	34	34	
Front-to-Back Total Power at 180° ± 30°, dB	22	22	20	22	24	24	26	24	
CPR at Boresight, dB	20	19	18	21	18	19	22	22	
CPR at Sector, dB	12	9	9	6	9	4	10	9	
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25	
Isolation, Inter-band, dB	25	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	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	200	200	200	200	200	200

Electrical Specifications

	Y2-Y5	Y2-Y5	Y2-Y5	Y2-Y5
Frequency Band, MHz	1710-1990	1920-2300	2300-2500	2490-2690
RF Port	7,8,9,10,11,12,13,14	7,8,9,10,11,12,13,14	7,8,9,10,11,12,13,14	7,8,9,10,11,12,13,14
Gain at Mid	16.9	18.1	18.3	18.6

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Tilt, dBi				
Beam Centers, Horizontal, degrees	±27	±27	±27	±27
Beamwidth, Horizontal, degrees	34	32	28	26
Beamwidth, Vertical, degrees	8.3	7.5	6.7	6.2
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	17	19	18
Front-to-Back Ratio at 180°, dB	36	36	34	33
Front-to-Back Total Power at 180° ± 30°, dB	30	29	28	27
CPR at Boresight, dB	17	21	18	19
Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153
Input Power per Port at	200	200	200	200

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50°C,
maximum,
watts

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.68 m ² 7.319 ft ²
Effective Projective Area (EPA), lateral	0.21 m ² 2.26 ft ²
Wind Loading @ Velocity, frontal	714.0 N @ 150 km/h (160.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	187.0 N @ 150 km/h (42.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	949.0 N @ 150 km/h (213.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	491.0 N @ 150 km/h (110.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	309 mm 12.165 in
Length, packed	2287 mm 90.039 in
Weight, gross	60.4 kg 133.159 lb

Regulatory Compliance/Certifications

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

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.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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