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)

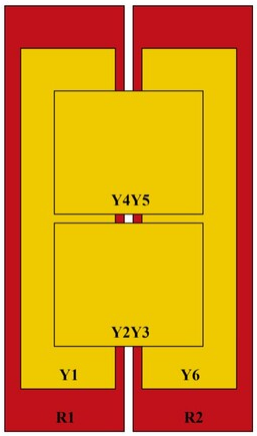
RRZZ2VV-6533B-R8

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

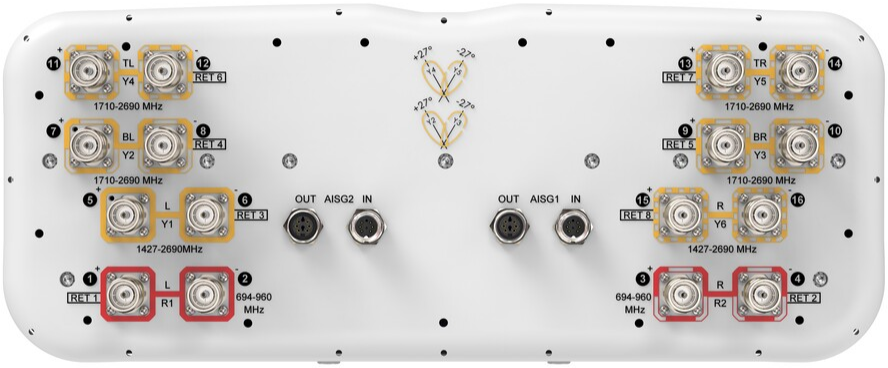


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	694-960	1 - 2	1	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	CPxxxxxxxxxxxxxxR2
Y1	1427-2690	5 - 6	3	CPxxxxxxxxxxxxxxY1
Y2	1710-2690	7 - 8	4	CPxxxxxxxxxxxxxxY2
Y3	1710-2690	9 - 10	5	CPxxxxxxxxxxxxxxY3
Y4	1710-2690	11 - 12	6	CPxxxxxxxxxxxxxxY4
Y5	1710-2690	13 - 14	7	CPxxxxxxxxxxxxxxY5
Y6	1427-2690	15 - 16	8	CPxxxxxxxxxxxxxxY6

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

Port Configuration

RRZZ2VV-6533B-R8



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

Vertical, degrees								
Beam Tilt, degrees	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
PIM, 3rd Order, 2 x 20 W, dBc	-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

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

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

50°C, maximum, watts

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.68 m² | 7.319 ft²
Effective Projective Area (EPA), lateral	0.21 m² | 2.26 ft²
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
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

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