

2VV-33B-R4

8-port multibeam antenna, 8x 1695–2690 MHz, 4x 33° HPBW, 4x RET

- Enhances network capacity and spectrum utilization when used in six sector applications
- Reduces antenna count to minimize Cap-Ex and Op-Ex costs – 3 antennas required for 6 sector configurations

General Specifications

Antenna Type	Multibeam
Band	Single band
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
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	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (4)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	395 mm 15.551 in
Depth	228 mm 8.976 in

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Length	1999 mm 78.701 in
Net Weight, without mounting kit	27.1 kg 59.745 lb

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz
Polarization	±45°
Total Input Power, maximum	1,200 W

Electrical Specifications

Frequency Band, MHz	1695–1880	1850–1990	1920–2180	2300–2400	2490–2690
Beam Centers, Horizontal, degrees	±27	±27	±27	±27	±27
Beamwidth, Horizontal, degrees	39	38	36	35	31
Beamwidth, Vertical, degrees	9.9	9.3	8.8	7.8	7.1
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	16	16	19	18
Front-to-Back Ratio at 180°, dB	32	34	35	33	32
Isolation, Cross Polarization, dB	27	27	27	27	27
Isolation, Inter-band, dB	28	28	28	28	28
VSWR Return loss, dB	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
Input Power per Port at 50°C, maximum, watts	200	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	1695–1880	1850–1990	1920–2180	2300–2400	2490–2690
Gain by all Beam Tilts, average, dBi	17.2	17.7	17.9	18.1	18.3
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.5	±0.5	±0.4	±0.4
Beamwidth, Horizontal Tolerance, degrees	±2.9	±2	±2.2	±1.6	±1.8
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.5	±0.7	±0.4	±0.3

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USLS, beampeak to 20° above beampeak, dB	17	15	15	17	16
Front-to-Back Total Power at 180° ± 30°, dB	23	26	27	28	27
CPR at Boresight, dB	22	26	25	25	19
CPR at 10 dB Horizontal Beamwidth, dB	12	12	12	9	9

Mechanical Specifications

Wind Loading @ Velocity, frontal	403.0 N @ 150 km/h (90.6 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	294.0 N @ 150 km/h (66.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	689.0 N @ 150 km/h (154.9 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	414.0 N @ 150 km/h (93.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	505 mm 19.882 in
Depth, packed	386 mm 15.197 in
Length, packed	2124 mm 83.622 in
Weight, gross	40.5 kg 89.287 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/Exempted



Included Products

- BSAMNT-3 – 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

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Performance Note

Severe environmental conditions may degrade optimum performance