

VV-65B-R1B

4-port sector antenna, 4x 1695–2690 MHz, 65° HPBW, 1x RET and internal Bias-T on first highband port. The two highband arrays utilize a common tilt.

- The RET interface comprises one pair of AISG input/output ports



Electrical Specifications

Frequency Band, MHz	1695–1880	1850–1990	1920–2200	2300–2500	2500–2690
Gain, dBi	18.3	18.9	19.4	19.1	19.5
Beamwidth, Horizontal, degrees	66	66	61	61	57
Beamwidth, Vertical, degrees	5.6	5.2	4.3	4.3	4.1
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	19	19	17	17	18
Front-to-Back Ratio at 180°, dB	32	34	35	35	36
Isolation, dB	30	30	30	30	30
Isolation, Intersystem, dB	30	30	30	30	30
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	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	350	350	350	350	300
Polarization	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	1695–1880	1850–1990	1920–2200	2300–2500	2500–2690
Gain by all Beam Tilts, average, dBi	17.9	18.5	19.1	19.1	19.2
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.4	±0.4	±0.5
	2 ° 17.8	2 ° 18.3	2 ° 19.0	2 ° 19.0	2 ° 19.2
Gain by Beam Tilt, average, dBi	7 ° 18.0	7 ° 18.6	7 ° 19.3	7 ° 19.3	7 ° 19.5
	12 ° 17.8	12 ° 18.3	12 ° 18.6	12 ° 18.6	12 ° 18.7
Beamwidth, Horizontal Tolerance, degrees	±2.9	±1.7	±2.6	±2.6	±4.3
Beamwidth, Vertical Tolerance, degrees	±0.3	±0.3	±0.2	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB	16	16	15	15	13
Front-to-Back Total Power at 180° ± 30°, dB	25	25	27	27	26
CPR at Boresight, dB	16	18	21	21	19
CPR at Sector, dB	10	10	8	8	9

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

General Specifications

Operating Frequency Band	1695 – 2690 MHz
Antenna Type	Sector
Band	Single band
Performance Note	Outdoor usage
Total Input Power, maximum	400 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total	4
RF Connector Quantity, high band	4

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RF Connector Interface	7-16 DIN Female
Grounding Type	RF connector body grounded to reflector and mounting bracket
Radome Material	PVC
RF Connector Location	Bottom
Wind Loading, frontal	696.0 N @ 150 km/h 156.5 lbf @ 150 km/h
Wind Loading, lateral	163.0 N @ 150 km/h 36.6 lbf @ 150 km/h
Wind Loading, rear	761.0 N @ 150 km/h 171.1 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	1786.0 mm 70.3 in
Width	305.0 mm 12.0 in
Depth	118.0 mm 4.6 in
Net Weight, without mounting kit	13.4 kg 29.5 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1
Internal RET	High band (1)
Power Consumption, idle state, maximum	2.0 W
Power Consumption, normal conditions, maximum	13.0 W
Protocol	3GPP/AISG 2.0 (Single RET)
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male

Packed Dimensions

Length	1955.0 mm 77.0 in
Width	410.0 mm 16.1 in
Depth	270.0 mm 10.6 in
Shipping Weight	24.0 kg 52.9 lb

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system



Included Products

BSAMNT-1 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one

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scissor top bracket set and one bottom bracket set.

* **Footnotes**

Performance Note	Severe environmental conditions may degrade optimum performance
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