

RVV2H-6533D-R5



10-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz 65° HPBW and 4x 1695–2180 MHz 2x 33° HPBW, 5x RET.

- All Internal RET actuators are connected in “Cascaded SRET” configuration

Electrical Specifications

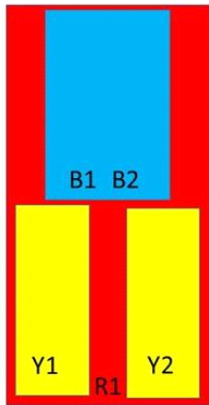
	R1	R1	HB-Dual-Beam2	HB-Dual-Beam2	Y1-Y2	Y1-Y2	Y1-Y2
Frequency Band, MHz	694–790	790–960	1695–1920	1920–2180	1695–1920	1920–2180	2300–2690
Gain, dBi	16.6	16.9	18.1	19.2	16.8	17.3	17.9
Beam Centers, Horizontal, degrees			±27	±27			
Beamwidth, Horizontal, degrees	69	65	32	30	63	62	63
Beamwidth, Vertical, degrees	8.5	7.4	7.2	6.6	7.4	6.6	5.5
Beam Tilt, degrees	0–10	0–10	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	17	16	15	18	18	16
Front-to-Back Ratio at 180°, dB	35	35	31	36	38	35	35
Isolation, Cross Polarization, dB	28	28	25	25	28	28	28
Isolation, Inter-band, dB	28	28	28	28	28	28	28
Isolation, Beam to Beam, dB			17	17			
VSWR Return Loss, dB	1.46 14.5	1.46 14.5	1.46 14.5	1.46 14.5	1.46 14.5	1.46 14.5	1.46 14.5
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	250	250
Polarization	±45°	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	694–790	790–960	1695–1920	1920–2180	1695–1920	1920–2180	2300–2690
Gain by all Beam Tilts, average, dBi	16.3	16.6	17.5	18.8	16.3	16.8	17.4
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±1	±0.6	±0.7	±0.7	±0.8
Gain by Beam Tilt, average, dBi	0° 16.2 5° 16.4 10° 15.8	0° 16.5 5° 16.7 10° 16.6	2° 17.5 7° 17.7 12° 17.2	2° 18.7 7° 18.9 12° 18.3	2° 16.2 7° 16.5 12° 16.1	2° 16.5 7° 17.0 12° 16.7	2° 17.1 7° 17.7 12° 17.1
Beamwidth, Horizontal Tolerance, degrees	±1.6	±2.3	±2.4	±1.6	±3.6	±2.8	±4.9
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.6	±0.4	±0.3	±0.6	±0.5	±0.5
USLS, beampeak to 20° above beampeak, dB	16	17	15	15	13	15	14
Front-to-Back Total Power at 180° ± 30°, dB	27	25	24	29	28	27	26
CPR at Boresight, dB	16	17	18	20	23	21	19
CPR at Sector, dB	10	10	7	8	10	12	7

* 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.](#)

Array Layout



Left Bottom Right

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxxR1
Y1	1695-2690	3-4	2	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxxY2
B1	1695-2180	7-8	4	CPxxxxxxxxxxxxxxxxB1
B2	1695-2280	9-10	5	CPxxxxxxxxxxxxxxxxB2

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

Port Configuration



General Specifications

Operating Frequency Band	1695 – 2180 MHz 1695 – 2690 MHz 694 – 960 MHz
Antenna Type	Multibeam
Band	Multiband
Performance Note	Outdoor usage
Total Input Power, maximum	1,000 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total	10
RF Connector Quantity, low band	2
RF Connector Quantity, high band	8
RF Connector Interface	4.3-10 Female
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	107.2 lbf @ 150 km/h 477.0 N @ 150 km/h
Wind Loading, lateral	409.0 N @ 150 km/h 91.9 lbf @ 150 km/h
Wind Loading, maximum	1010.0 N @ 150 km/h 227.1 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	2688.0 mm 105.8 in
Width	350.0 mm 13.8 in
Depth	208.0 mm 8.2 in
Net Weight, without mounting kit	35.0 kg 77.2 lb

Remote Electrical Tilt (RET) Information

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

RVV2H-6533D-R5

Packed Dimensions

Length	2830.0 mm 111.4 in
Width	460.0 mm 18.1 in
Depth	350.0 mm 13.8 in
Shipping Weight	48.6 kg 107.1 lb

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU

ISO 9001:2015

China RoHS SJ/T 11364-2014

Classification

Compliant by Exemption

Designed, manufactured and/or distributed under this quality management system

Above Maximum Concentration Value (MCV)



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