

RRVV3VV-6520B-R7



20-port sector/multibeam antenna, 4x 694–960 MHz 2x 65° HPBW, 4x 1695–2690 MHz 2x 65° HPBW and 12x 1695–2690 MHz 6x 20° HPBW, 7x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- Enhances network capacity and consolidate tri-beams configuration and standard 3 sectors in low and middle band on same antenna platform
- Support 4T4R configuration in tri-beams 20° HPBW and also in low band, middle band 3 sectors 65° HPBW

General Specifications

Antenna Type	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, mid band	16
RF Connector Quantity, low band	4
RF Connector Quantity, total	20

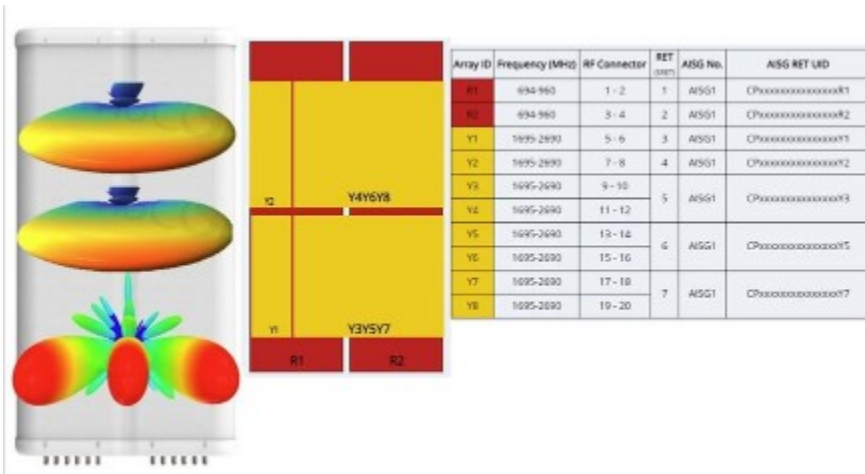
Remote Electrical Tilt (RET) Information

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	Low band (2) Mid band (5)
Power Consumption, active state, maximum	8 W

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Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)
Dimensions	
Width	640 mm 25.197 in
Depth	235 mm 9.252 in
Length	2100 mm 82.677 in
Net Weight, without mounting kit	67.4 kg 148.591 lb

Array Layout



Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,400 W

Electrical Specifications

	R1-R2	R1-R2	R1-R2	Y1-Y2	Y1-Y2	Y3-Y8	Y3-Y8
Frequency Band, MHz	694–790	790–890	890–960	1695–2180	2300–2690	1695–2180	2300–2690
RF Port	1-4	1-4	1-4	5-8	5-8	9-20	9-20
Gain, dBi	15.6	16	15.7	16.5	17.3	19.6	20.6
Beam Centers, Horizontal, degrees						±0 ±35	±0 ±35
Beamwidth, Horizontal, degrees	69	60	69	68	59	21	17
Beamwidth, Vertical, degrees	11.1	9.9	8.8	8.2	6.5	8.2	6.5
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–10	2–10
USLS (First Lobe), dB	16	15	15	15	15	15	15
Front-to-Back Ratio at 180°, dB	34	32	24	32	29	32	29

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CPR at Boresight, dB	23	26	16	24	17	16	14
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25
Isolation, Beam to Beam, dB						16	17
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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	250	250	250	200	200	200	200

Mechanical Specifications

Wind Loading @ Velocity, frontal	834.0 N @ 150 km/h (187.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	243.0 N @ 150 km/h (54.6 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,063.0 N @ 150 km/h (239.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	521.0 N @ 150 km/h (117.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	752 mm 29.606 in
Depth, packed	387 mm 15.236 in
Length, packed	2254 mm 88.74 in
Weight, gross	87.6 kg 193.125 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
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.
BSAMNT-M4	-	Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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