

RR3VV-6520D-R5



16-port sector/multibeam antenna, 4x 694–960 MHz 2x 65° HPBW and 12x 1695–2690 MHz 6x 20° HPBW, 5x 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
- The three-beam array enables the configuration of up to nine sectors in mid bands in a regular three faces site
- The 65° HPBW pattern in low band keeps the traditional three sector coverage layers in the sub 1 GHz bands

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	12
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	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	Low band (2) Mid band (3)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W

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Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

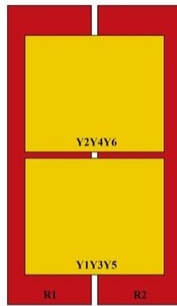
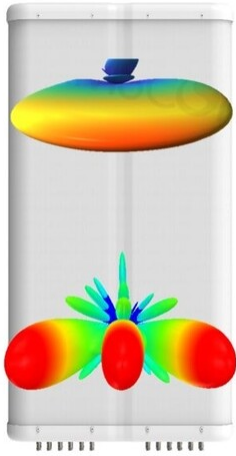
Width 498 mm | 19.606 in

Depth 197 mm | 7.756 in

Length 2688 mm | 105.827 in

Net Weight, antenna only 64 kg | 141.096 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8			
Y3	1695-2690	9 - 10	4	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12			
Y5	1695-2690	13 - 14	5	AISG1	CPxxxxxxxxxxxxxxxxY5
Y6	1695-2690	15 - 16			

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

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	1,000 W
BASTA Version, electrical	BASTA v12

Electrical Specifications

	R1-R2	R1-R2	R1-R2	Y1-Y6	Y1-Y6	Y1-Y6	Y1-Y6
Frequency Band, MHz	698–790	790–890	890–960	1710–1990	1920–2180	2300–2500	2500–2690
RF Port	1-4	1-4	1-4	5-16	5-16	5-16	5-16
Gain, dBi	15.7	15.8	16	19.7	20.5	20.9	20.9
Beam Centers, Horizontal, degrees				±0 ±35	±0 ±35	±0 ±35	±0 ±35
Beamwidth, Horizontal, degrees	74	69	67	24	21	19	17
Beamwidth, Vertical, degrees	8.9	8	7.2	7.2	6.6	5.7	5.4
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	17	16	17	17	17	18

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Front-to-Back Ratio at 180°, dB	29	29	32	32	33	30	28
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	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
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

BASTA Version, mechanical BASTA v12

Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	309 mm 12.165 in
Length, packed	2935 mm 115.551 in
Weight, gross	86.7 kg 191.141 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