

RRV42H-6533D-R8



16-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz 65° HPBW and 4x 1695–2400 MHz 2x 33° HPBW, 8x RET.

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

General Specifications

Antenna Type	Multibeam
Band	Multiband
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, high 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	2 female 2 male
Input Voltage	10–30 Vdc
Internal RET	High band (6) Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

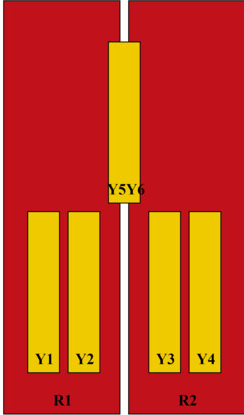
Dimensions

Width	498 mm 19.606 in
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Depth	197 mm 7.756 in
Length	2688 mm 105.827 in
Net Weight, without mounting kit	53.6 kg 118.168 lb

Array Layout

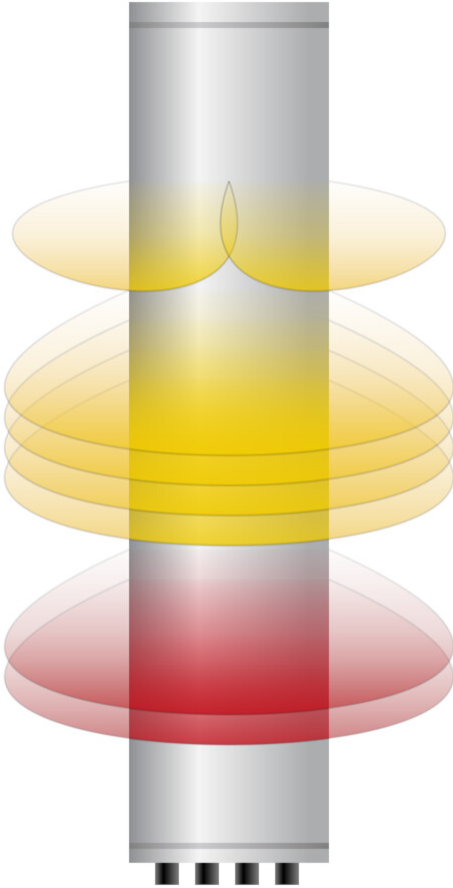


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxxY4
Y5	1695-2400	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxxxY5
Y6	1695-2400	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxxxY6

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

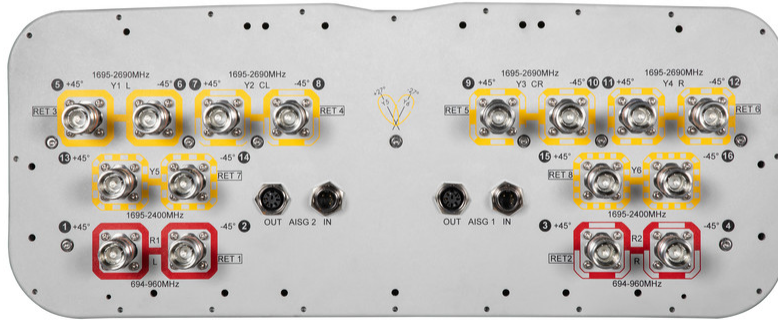
Beams Configuration

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Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2400 MHz 1695 – 2690 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	R1-R2	R1-R2	Y1-Y4	Y1-Y4	Y1-Y4	Y5-Y6	Y5-Y6	Y5-Y6
Frequency Band, MHz	694–790	790–960	1695–1920	1920–2180	2300–2690	1695–1880	1920–2180	2300–2400
Gain, dBi	15.9	16.6	16.5	17.8	18.4	17.9	19.4	19.3
Beam Centers, Horizontal, degrees						±27	±27	±27
Beamwidth, Horizontal, degrees	70	62	68	62	58	32	31	30
Beamwidth, Vertical, degrees	9	7.7	7.4	6.5	5.5	7.4	6.5	5.7
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	19	19	18	19	24	19	21	22
Front-to-Back Ratio at 180°, dB	31	30	33	32	31	32	36	32
Isolation, Cross Polarization,	28	28	25	25	25	25	25	25

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dB

Isolation, Inter-band, dB	28	28	28	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	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	-150
Input Power per Port at 50°C, maximum, watts	300	300	200	200	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–960	1695–1920	1920–2180	2300–2690	1695–1880	1920–2180	2300–2400
Gain by all Beam Tilts, average, dBi	15.6	16.2	16.1	17.3	18	17.2	18.7	18.7
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.7	±0.8	±0.5	±1.3	±0.8	±1.3
Gain by Beam Tilt, average, dBi	2° 15.6 7° 15.7 12° 15.5	2° 16.1 7° 16.4 12° 16.1	2° 16.0 7° 16.2 12° 16.1	2° 17.1 7° 17.5 12° 17.2	2° 17.9 7° 18.2 12° 17.8	2° 17.2 7° 17.5 12° 17.1	2° 18.7 7° 19.1 12° 18.7	2° 18.9 7° 19.1 12° 18.6
Beamwidth, Horizontal Tolerance, degrees	±5.3	±4.6	±5.9	±5.3	±4.5	±2.2	±1.5	±1
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.7	±0.6	±0.5	±0.4	±0.4	±0.5	±0.2
USLS, beampeak to 20° above beampeak, dB	17	17	16	18	17	16	17	14
Front-to-Back Total Power at 180° ± 30°, dB	21	22	26	26	26	27	30	29
CPR at Boresight, dB	19	20	19	21	20	17	19	15
CPR at Sector, dB	11	9	7	7	7			
CPR at 10 dB Horizontal Beamwidth, dB						4	8	11

Mechanical Specifications

Mechanical Tilt Range	0°–12°
Wind Loading @ Velocity, frontal	1,070.0 N @ 150 km/h (240.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	375.0 N @ 150 km/h (84.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,385.0 N @ 150 km/h (311.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	880.0 N @ 150 km/h (197.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
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Depth, packed	309 mm 12.165 in
Length, packed	2935 mm 115.551 in
Weight, gross	74.6 kg 164.465 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ROHS	Compliant
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