RRV42VV-6533D-R10

20-port sector/multibeam antenna 4x 694–960 MHz , 8x 1695-2690 MHz 65° HPBW and 8x 1710–2690 MHz 2x 2-Beam 33°HPBW, 10x RET. Band cascaded SRET

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 | Wind loading figures are validated by wind tunnel measurements described in EN1991-1-4 standard
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high 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	2 female | 2 male
Input Voltage	10–30 Vdc
Internal RET	High band (8) | Low band (2)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
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

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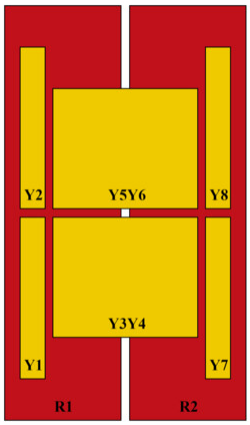
Net Weight, antenna only	58.6 kg | 129.191 lb

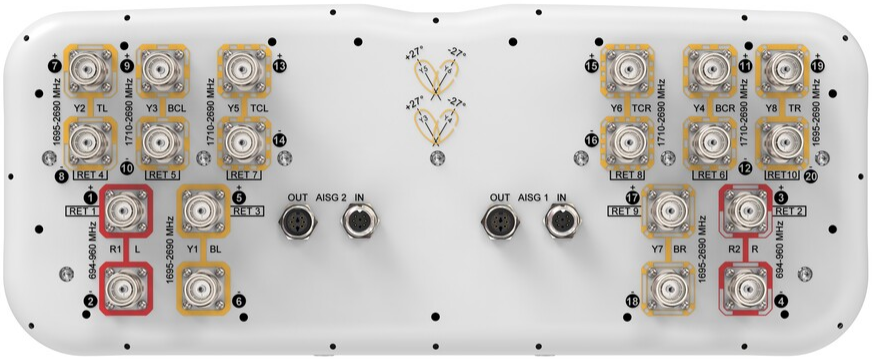
Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxxxY2
Y3	1710-2690	9 - 10	33°	5	AISG1	CPxxxxxxxxxxxxxxY3
Y4	1710-2690	11 - 12	33°	6	AISG1	CPxxxxxxxxxxxxxxY4
Y5	1710-2690	13 - 14	33°	7	AISG1	CPxxxxxxxxxxxxxxY5
Y6	1710-2690	15 - 16	33°	8	AISG1	CPxxxxxxxxxxxxxxY6
Y7	1695-2690	17 - 18	65°	9	AISG1	CPxxxxxxxxxxxxxxY7
Y8	1695-2690	19 - 20	65°	10	AISG1	CPxxxxxxxxxxxxxxY8

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

Port Configuration



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz | 1710 – 2690 MHz | 694 – 960 MHz

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Polarization	±45°
Total Input Power, maximum	1,300 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**694–790**	**790–890**	**880–960**	**1695–1920**	**1920–2180**	**2300–2690**	**1710–1920**	**1920–2180**	**2300–2690**
Gain, dBi	15.6	15.9	15.9	15.7	16.9	17.7	17.5	19	19.4
Beam Centers, Horizontal, degrees							±27	±27	±27
Beamwidth, Horizontal, degrees	71	65	63	76	67	59	37	34	28
Beamwidth, Vertical, degrees	9.3	8.3	7.6	7.1	6.4	5.4	7.2	6.5	5.5
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	17	16	16	16	19	16	18	20
Front-to-Back Ratio at 180°, dB	30	28	30	32	30	33	39	38	35
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25	25
Isolation, Beam to Beam, dB							17	17	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	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50° C, maximum, watts	250	250	250	200	200	150	200	200	150

Electrical Specifications, BASTA

Frequency Band, MHz	**694–790**	**790–890**	**880–960**	**1695–1920**	**1920–2180**	**2300–2690**	**1710–1920**	**1920–2180**	**2300–2690**
Gain by all Beam Tilts, average, dBi	15.1	15.6	15.7	15.2	16.3	17.3	17	18.4	18.8
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.4	±0.4	±0.8	±0.7	±0.4	±1.1	±0.9	±1
Beamwidth, Horizontal Tolerance, degrees	±7.9	±9.2	±5.4	±6.7	±7	±4.5	±3.4	±2.3	±3.6
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.5	±0.3	±0.5	±0.4	±0.4	±0.5	±0.4	±0.5
USLS, beampeak to 20° above beampeak, dB	17	16	15	14	16	14	15	15	13
Front-to-Back Total Power	22	22	23	23	23	25	31	31	28

at 180° ± 30°, dB									
CPR at Boresight, dB	23	22	18	19	22	23	16	20	20
CPR at Sector, dB	12	9	13	8	6	8			
CPR at 10 dB Horizontal Beamwidth, dB							6	11	12

Mechanical Specifications

Wind Loading @ Velocity, frontal	944.0 N @ 150 km/h (212.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	292.0 N @ 150 km/h (65.6 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,130.0 N @ 150 km/h (254.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	650.0 N @ 150 km/h (146.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

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	80.4 kg | 177.251 lb

Regulatory Compliance/Certifications

Agency	**Classification**
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

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