RR2VV-6533D-R6

12-port sector/multibeam antenna, 4x 698–960 MHz 65° HPBW and 8x 1710–2690 MHz 4x 33° HPBW, 6x 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 through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces

General Specifications

Antenna Type	Sector
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, high band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

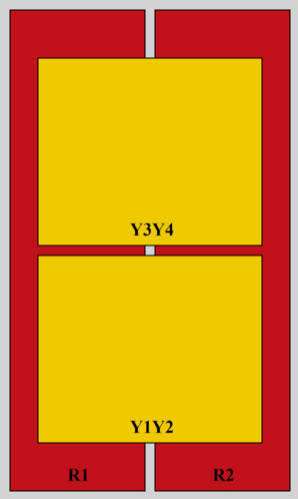
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (4) | Low band (2)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

RR2VV-6533D-R6

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	2688 mm | 105.827 in
Net Weight, antenna only	52.6 kg | 115.963 lb

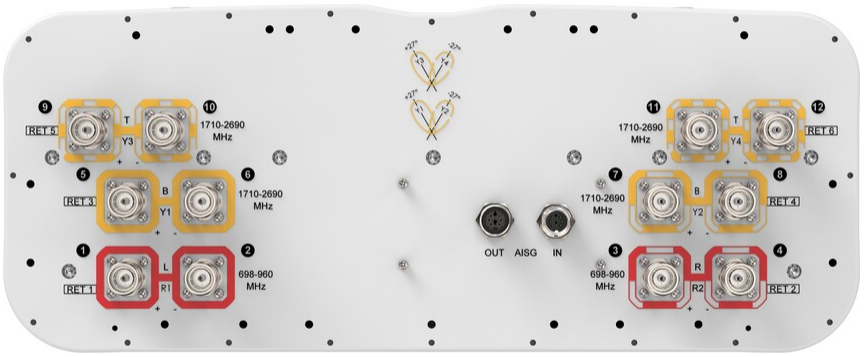
Array Layout



RF Connector	Array ID	Frequency (MHz)	RET (SRET)	AISG RET UID
1 - 2	R1	698-960	1	CPxxxxxxxxxxxxxxxR1
3 - 4	R2	698-960	2	CPxxxxxxxxxxxxxxxR2
5 - 6	Y1	1710-2690	3	CPxxxxxxxxxxxxxxxY1
7 - 8	Y2	1710-2690	4	CPxxxxxxxxxxxxxxxY2
9 - 10	Y3	1710-2690	5	CPxxxxxxxxxxxxxxxY3
11 - 12	Y4	1710-2690	6	CPxxxxxxxxxxxxxxxY4

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

Port Configuration



RR2VV-6533D-R6

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1710 – 2690 MHz | 698 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,400 W

Electrical Specifications

Frequency Band, MHz	**698–790**	**790–890**	**890–960**	**1710–1880**	**1850–1990**	**1920–2180**	**2300–2500**	**2500–2690**
Gain, dBi	15.7	16.1	16.5	18.3	19	19.5	19.8	19.8
Beamwidth, Horizontal, degrees	69	62	60	32	30	30	26	26
Beamwidth, Vertical, degrees	9.2	8.3	7.5	7.3	6.8	6.4	5.6	5.2
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	19	21	17	17	18	18	18	19
Front-to-Back Ratio at 180°, dB	29	28	31	36	36	36	33	32
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	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	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	300	200	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	**698–790**	**790–890**	**890–960**	**1710–1880**	**1850–1990**	**1920–2180**	**2300–2500**	**2500–2690**
Gain by all Beam Tilts, average, dBi	15.4	15.9	16.2	17.6	18.5	18.9	19.4	19.3
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.4	±1.3	±0.6	±0.7	±0.6	±0.6
Beamwidth, Horizontal Tolerance, degrees	±6.2	±7.5	±5	±3.1	±1.4	±1.8	±1.5	±1.5
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.5	±0.5	±0.5	±0.3	±0.5	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	19	18	17	13	14	16	16	15
Front-to-Back Total Power at 180° ± 30°, dB	22	21	22	28	29	30	28	27

CPR at Boresight, dB	23	24	24	18	20	22	23	22
CPR at Sector, dB	13	9	11					

Mechanical Specifications

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	241.4 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	75 kg | 165.347 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