

RVV2H-6533D-R5



10-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz 65° HPBW and 4x 1695–2180 MHz 2x 33° HPBW, 5x 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	8
RF Connector Quantity, low band	2
RF Connector Quantity, total	10

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 (4) Low band (1)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

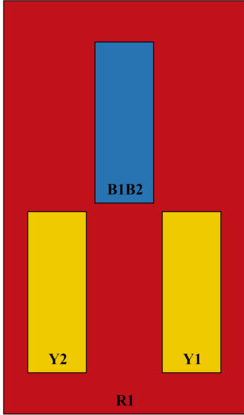
Dimensions

Width	350 mm 13.78 in
--------------	-------------------

RVV2H-6533D-R5

Depth	208 mm 8.189 in
Length	2688 mm 105.827 in
Net Weight, without mounting kit	35 kg 77.162 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	CPxxxxxxxxxxxxR1
Y1	1695-2690	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxY2
B1	1695-2180	7 - 8	33°	4	AISG1	CPxxxxxxxxxxxxB1
B2	1695-2180	9 - 10	33°	5	AISG1	CPxxxxxxxxxxxxB2

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

Port Configuration



Electrical Specifications

Impedance	50 ohm
------------------	--------

RVV2H-6533D-R5

Operating Frequency Band	1695 – 2180 MHz 1695 – 2690 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	694–806	790–896	890–960	1695–1990	1920–2300	1695–1990	1920–2300
Beamwidth, Horizontal, degrees	68	66	64	32	30	61	62
Beamwidth, Vertical, degrees	8.4	7.6	7.1	7	6.6	7.3	6.5
Beam Tilt, degrees	0–10	0–10	0–10	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	17	15	15	15	18	17
Front-to-Back Ratio at 180°, dB	35	33	35	32	36	38	35
Isolation, Cross Polarization, dB	28	28	28	25	28	28	28
Isolation, Inter-band, dB	28	28	28	28	28	28	28
Isolation, Beam to Beam, dB				17	17		
VSWR Return loss, dB	1.46 14.5	1.46 14.5	1.46 14.5	1.46 14.5	1.46 14.5	1.46 14.5	1.46 14.5
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	694–806	790–896	890–960	1695–1990	1920–2300	1695–1990	1920–2300
Gain by all Beam Tilts, average, dBi	16.4	16.6	16.7	17.9	18.8	16.4	16.9
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.3	±0.5	±1.2	±0.6	±0.7	±0.7
Beamwidth, Horizontal Tolerance, degrees	±1.6	±2.2	±1.5	±2.4	±1.7	±3.2	±3.6
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.4	±0.3	±0.5	±0.3	±0.6	±0.6
USLS, beampeak to 20° above beampeak, dB	16	17	15	15	15	13	15
Front-to-Back Total Power at 180° ± 30°, dB	27	26	25	25	28	28	27
CPR at Boresight, dB	16	17	17	19	20	22	21

Electrical Specifications

RVV2H-6533D-R5

Frequency Band, MHz	2300–2500	2490–2690
Beamwidth, Horizontal, degrees	63	63
Beamwidth, Vertical, degrees	5.8	5.4
Beam Tilt, degrees	2–12	2–12
USLS (First Lobe), dB	16	16
Front-to-Back Ratio at 180°, dB	35	35
Isolation, Cross Polarization, dB	28	28
Isolation, Inter-band, dB	28	28
VSWR Return loss, dB	1.46 14.5	1.46 14.5
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	2300–2500	2490–2690
Gain by all Beam Tilts, average, dBi	17.5	17.4
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.8
Beamwidth, Horizontal Tolerance, degrees	±5.5	±3.8
Beamwidth, Vertical Tolerance, degrees	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	15	15
Front-to-Back Total Power at 180° ± 30°, dB	26	26
CPR at Boresight, dB	21	19

Mechanical Specifications

Mechanical Tilt Range	0°–12°
Wind Loading @ Velocity, frontal	477.0 N @ 150 km/h (107.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	409.0 N @ 150 km/h (91.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,010.0 N @ 150 km/h (227.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	506.0 N @ 150 km/h (113.8 lbf @ 150 km/h)

RVV2H-6533D-R5

Wind Speed, maximum 241 km/h (150 mph)

Packaging and Weights

Width, packed 460 mm | 18.11 in
Depth, packed 350 mm | 13.78 in
Length, packed 2830 mm | 111.417 in
Weight, gross 48.6 kg | 107.145 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.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance