RVV2HH-6533D-R7

14-port sector antenna, 2x 694–960 and 4x 1695-2690 MHz 65° HPBW and 8x 1695-2400 MHz 4x 33° HPBW, 7x RET.

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

OBSOLETE

This product was discontinued on: March 31, 2023

Replaced By:

RVV2VV-6533D-R7	14-port sector antenna, 2x 694–960 and 4x 1695-2690 MHz 65° HPBW and 8x 1695-2690 MHz 4x 33° HPBW, 7x RET.

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	2
RF Connector Quantity, total	14

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 (1)

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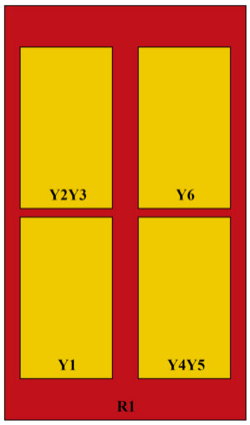
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	2688 mm | 105.827 in
Net Weight, without mounting kit	55.6 kg | 122.577 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
Y1	1695-2400	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1695-2400	5 - 6	33°	3	AISG1	CPxxxxxxxxxxxxxxY2
Y3	1695-2400	7 - 8	33°	4	AISG1	CPxxxxxxxxxxxxxxY3
Y4	1695-2400	9 - 10	65°	5	AISG1	CPxxxxxxxxxxxxxxY4
Y5	1695-2690	11 - 12	33°	6	AISG1	CPxxxxxxxxxxxxxxY5
Y6	1695-2690	13 - 14	33°	7	AISG1	CPxxxxxxxxxxxxxxY6

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

Beams Configuration

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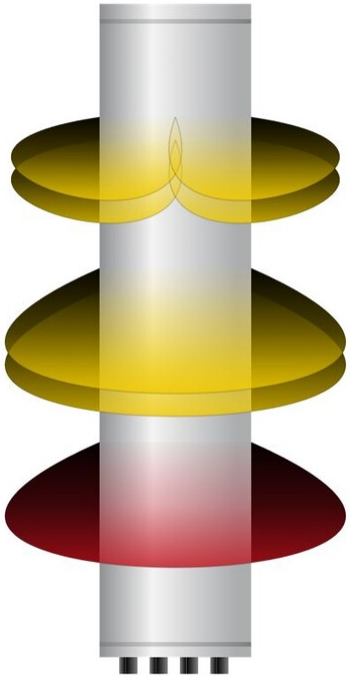

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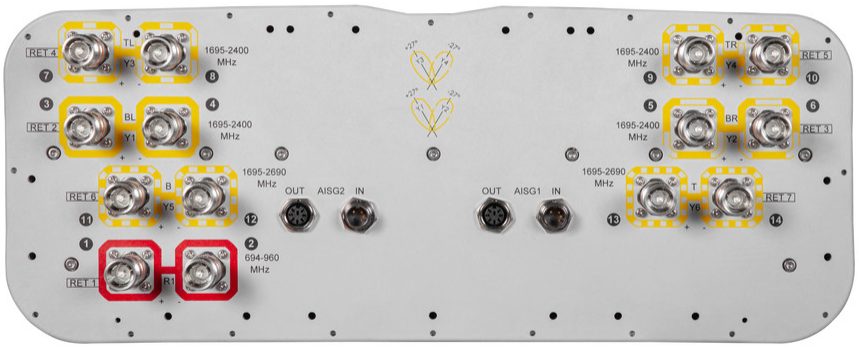
Port Configuration



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2400 MHz | 1695 – 2690 MHz | 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W @ 50 °C

Electrical Specifications

	R1	R1	R1	Y1-Y4	Y1-Y4	Y5&Y6	Y5&Y6	Y5&Y6
Frequency Band, MHz	**694–790**	**790–890**	**880–960**	**1695–1920**	**1920–2400**	**1695–1920**	**1920–2180**	**2300–2690**
Gain, dBi	16.5	16.4	16.9	17.6	18.9	17.3	18.3	18.6
Beam Centers, Horizontal, degrees				±27	±27			
Beamwidth, Horizontal, degrees	62	63	59	34	29	67	64	59
Beamwidth, Vertical, degrees	8.5	7.7	7.1	7.6	6.4	6.3	5.6	4.9
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	18	19	18	17	17	18	19
Front-to-Back Ratio at 180°,	34	31	31	36	35	36	36	29

dB								
Isolation, Cross Polarization, dB	28	28	28	25	25	28	28	28
Isolation, Inter-band, dB	30	30	30	30	30	30	30	30
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	1.46 | 14.5
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	300	300	300	250	250	250	250	200
Input Total Power per Antenna at 50°C, maximum, watts	300	300	300	250	250	250	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	**694–790**	**790–890**	**880–960**	**1695–1920**	**1920–2400**	**1695–1920**	**1920–2180**	**2300–2690**
Gain by all Beam Tilts, average, dBi	16.3	16.2	16.5	17.1	18.3	16.8	17.4	17.7
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.3	±0.5	±1	±1.1	±0.7	±0.6	±0.5
Gain by Beam Tilt, average, dBi	2 ° | 16.1 7 ° | 16.2 12 ° | 16.1	2 ° | 15.8 7 ° | 16.1 12 ° | 16.0	2 ° | 15.9 7 ° | 16.3 12 ° | 16.2	2 ° | 17.1 7 ° | 17.2 12 ° | 16.9	2 ° | 18.4 7 ° | 18.5 12 ° | 17.8	2 ° | 16.6 7 ° | 16.7 12 ° | 16.6	2 ° | 17.3 7 ° | 17.6 12 ° | 17.3	2 ° | 17.6 7 ° | 17.9 12 ° | 17.6
Beamwidth, Horizontal Tolerance, degrees	±2.8	±2.5	±4.7	±3.9	±3.3	±3.2	±4.8	±4.2
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.4	±0.4	±0.5	±0.6	±0.4	±0.3	±0.4
USLS, beampeak to 20° above beampeak, dB	15	16	16	15	13	14	16	15
Front-to-Back Total Power at 180° ± 30°, dB	29	28	28	28	27	27	28	25
CPR at Boresight, dB	18	19	18	16	19	18	23	22
CPR at Sector, dB	11	9	8			12	10	6
CPR at 10 dB Horizontal Beamwidth, dB				8	10			

Mechanical Specifications

Effective Projective Area (EPA), frontal	1 m² | 10.764 ft²
Effective Projective Area (EPA), lateral	0.35 m² | 3.767 ft²
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)

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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	76.56 kg | 168.786 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
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.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance