

RV-65A-R2



4-port sector antenna, 2x 694–960 and 2x 1695–2690 MHz, 65° HPBW, 2x 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

OBSOLETE

This product was discontinued on: November 30, 2023

Replaced By:

RVV-65A-R3

6-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz, 65° HPBW, 3x RET

General Specifications

Antenna Type	Sector
Band	Multiband
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 white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	2
RF Connector Quantity, low band	2
RF Connector Quantity, total	4

Remote Electrical Tilt (RET) Information

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 (1) Low band (1)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	10 W

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Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

Width 350 mm | 13.78 in

Depth 208 mm | 8.189 in

Length 1400 mm | 55.118 in

Net Weight, without mounting kit 17.8 kg | 39.242 lb

Array Layout



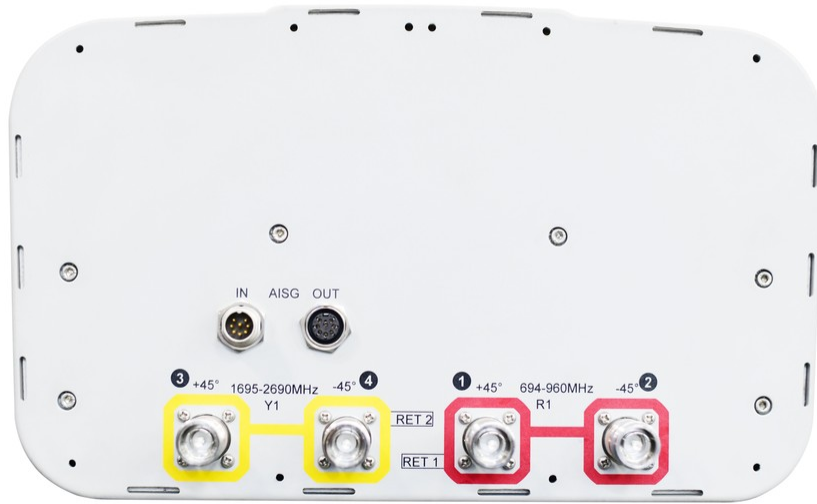
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	ANxxxxxxxxxxxxxxxxx1
Y1	1695-2690	3-4	2	ANxxxxxxxxxxxxxxxxx2

Left Right
Bottom

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

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	800 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	694–790	790–890	890–960	1695–1920	1920–2180	2300–2690
Gain, dBi	14.1	14.2	14.6	16.9	17.2	18.2
Beamwidth, Horizontal, degrees	68	66	62	64	66	61
Beamwidth, Vertical, degrees	15	13.9	12.9	7.4	6.6	5.7
Beam Tilt, degrees	2–15	2–15	2–15	2–12	2–12	2–12
USLS (First Lobe), dB	13	14	15	22	20	21
Front-to-Back Ratio at 180°, dB	32	29	29	34	33	37
Isolation, Cross Polarization, dB	28	28	28	28	28	28
Isolation, Inter-band, dB	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

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PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960	1695–1920	1920–2180	2300–2690
Gain by all Beam Tilts, average, dBi	13.7	13.9	14.3	16.6	16.9	17.8
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.5	±0.7	±0.5	±0.5	±0.5
Gain by Beam Tilt, average, dBi	2° 13.7 9° 13.7 16° 13.8	2° 13.9 9° 14.0 16° 14.0	2° 14.2 9° 14.3 16° 14.2	2° 16.1 7° 16.7 12° 16.6	2° 16.4 7° 16.9 12° 17.0	2° 17.3 7° 17.9 12° 17.8
Beamwidth, Horizontal Tolerance, degrees	±2.6	±2.6	±4.0	±3.5	±2.2	±6.9
Beamwidth, Vertical Tolerance, degrees	±1	±0.6	±1	±0.5	±0.4	±0.4
USLS, beampeak to 20° above beampeak, dB	16	15	15	14	15	14
Front-to-Back Total Power at 180° ± 30°, dB	26	24	23	27	27	27
CPR at Boresight, dB	14	14	16	20	20	20
CPR at Sector, dB	8	10	8	10	12	7

Mechanical Specifications

Mechanical Tilt Range	0°–20.5°
Wind Loading @ Velocity, frontal	221.0 N @ 150 km/h (49.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	185.0 N @ 150 km/h (41.6 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	469.0 N @ 150 km/h (105.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	234.0 N @ 150 km/h (52.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	447 mm 17.598 in
Depth, packed	354 mm 13.937 in
Length, packed	1544 mm 60.787 in
Weight, gross	29 kg 63.934 lb

Regulatory Compliance/Certifications

RV-65A-R2

Agency

CHINA-ROHS

ISO 9001:2015

ROHS

UK-ROHS



Classification

Above maximum concentration value

Designed, manufactured and/or distributed under this quality management system

Compliant/Exempted

Compliant/Exempted

Included Products

- BSAMNT-3 – 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