RV4-65D-R5-V5

10-port sector antenna, 2x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 5x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

OBSOLETE

This product was discontinued on: March 31, 2022

Replaced By:

RV4-65D-R5-V6	10-port sector antenna, 2x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 5x 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
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	7-16 DIN 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

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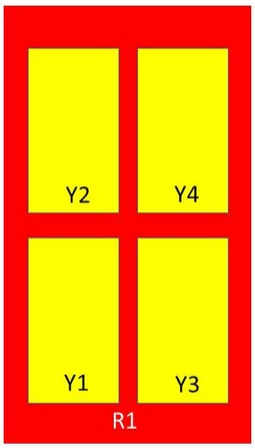
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	350 mm | 13.78 in
Depth	208 mm | 8.189 in
Length	2688 mm | 105.827 in
Net Weight, without mounting kit	34.5 kg | 76.059 lb

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxR1
Y1	1695-2690	3-4	2	CPxxxxxxxxxxxxxxxY1
Y2	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxY2
Y3	1695-2690	7-8	4	CPxxxxxxxxxxxxxxxY3
Y4	1695-2690	9-10	5	CPxxxxxxxxxxxxxxxY4

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

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**	**1695–1880**	**1920–2200**	**2300–2500**	**2500–2690**
Gain, dBi	16.7	17	17.4	16.8	17.4	18.1	18.1
Beamwidth, Horizontal,	67	65	62	62	63	62	61

degrees							
Beamwidth, Vertical, degrees	8.2	7.3	6.7	7.5	6.5	5.7	5.3
Beam Tilt, degrees	0–10	0–10	0–10	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	21	21	15	16	15	16
Front-to-Back Ratio at 180°, dB	31	36	36	31	34	35	34
Isolation, Cross Polarization, dB	28	28	28	28	28	28	28
Isolation, Inter-band, dB	30	30	30	30	30	30	30
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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	**694–790**	**790–890**	**890–960**	**1695–1880**	**1920–2200**	**2300–2500**	**2500–2690**
Gain by all Beam Tilts, average, dBi	16.4	16.9	17.3	16.3	17	17.7	17.7
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.3	±0.3	±0.7	±0.6	±0.5	±0.5
Gain by Beam Tilt, average, dBi	0 ° | 16.3 5 ° | 16.5 10 ° | 16.5	0 ° | 16.7 5 ° | 17.0 10 ° | 17.0	0 ° | 17.0 5 ° | 17.4 10 ° | 17.2	2 ° | 16.2 7 ° | 16.4 12 ° | 16.1	2 ° | 16.8 7 ° | 17.1 12 ° | 16.9	2 ° | 17.4 7 ° | 17.8 12 ° | 17.6	2 ° | 17.6 7 ° | 17.9 12 ° | 17.4
Beamwidth, Horizontal Tolerance, degrees	±1	±2.1	±1.6	±3.4	±2.4	±3.5	±3.3
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.4	±0.3	±0.5	±0.5	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	15	16	16	12	14	14	13
Front-to-Back Total Power at 180° ± 30°, dB	26	25	25	26	26	27	26
CPR at Boresight, dB	18	19	18	19	20	24	20
CPR at Sector, dB	10	10	11	10	10	7	8

Mechanical Specifications

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)

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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	48.5 kg | 106.924 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