

# RV3-65D-R4-V3



8-port sector antenna, 2x 694–960 and 6x 1695–2690 MHz, 65° HPBW, 4x IntRET. Antenna rear wind loading 506N @ 150km/h

- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Wind Loading; Frontal / Lateral / Rear – 477 / 409 / 506 N @ 150km/h
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Aluminum   Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	6
<b>RF Connector Quantity, mid band</b>	0
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	8

## Remote Electrical Tilt (RET) Information

<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (3)   Low band (1)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions, maximum</b>	8 W

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**Protocol** 3GPP/AISG 2.0 (Single RET)

## Dimensions

**Width** 350 mm | 13.78 in

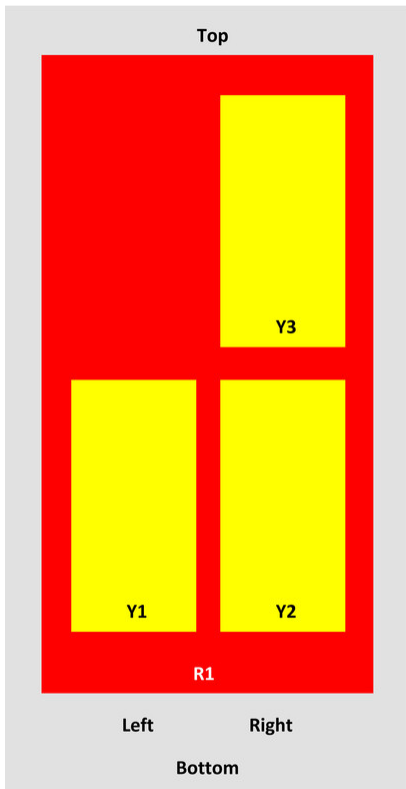
**Depth** 208 mm | 8.189 in

**Length** 2688 mm | 105.827 in

**Net Weight, without mounting kit** 31.7 kg | 69.886 lb

## Array Layout

RV3-65D-R4



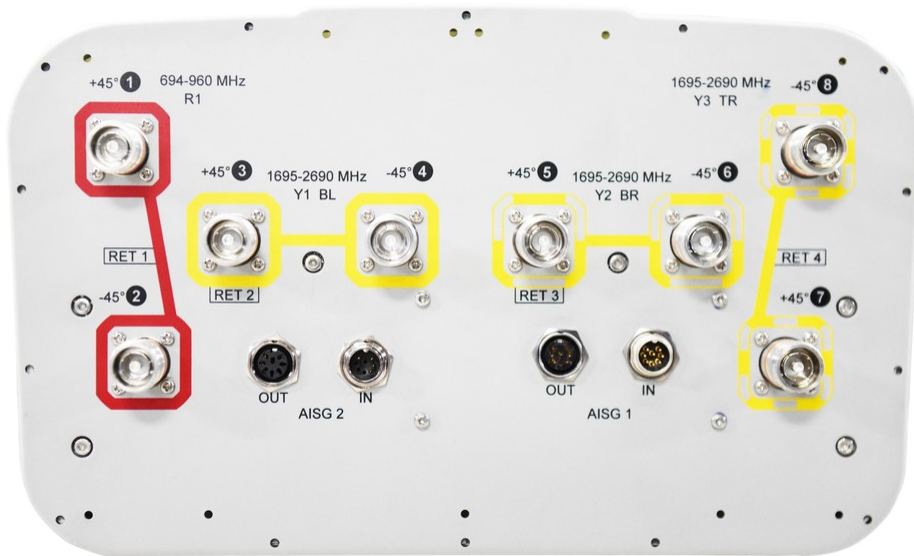
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	ANXXXXXXXXXXXXX1
Y1	1695-2690	3-4	2	ANXXXXXXXXXXXXX2
Y2	1695-2690	5-6	3	ANXXXXXXXXXXXXX3
Y3	1695-2690	7-8	4	ANXXXXXXXXXXXXX4

View from the front of the antenna

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

## Port Configuration

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## Electrical Specifications

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

## Electrical Specifications

Frequency Band, MHz	694–790	790–890	890–960	1695–1920	1920–2200	2300–2500	2500–2690
<b>Gain, dBi</b>	16.5	17.3	17.4	17	17.5	18.2	18.2
<b>Beamwidth, Horizontal, degrees</b>	67	64	61	63	63	63	62
<b>Beamwidth, Vertical, degrees</b>	8.2	7.4	6.8	7.3	6.4	5.6	5.3
<b>Beam Tilt, degrees</b>	0–10	0–10	0–10	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	18	24	23	16	17	16	16
<b>Front-to-Back Ratio at 180°, dB</b>	31	33	34	35	37	37	37
<b>Isolation, Cross Polarization, dB</b>	28	28	28	25	28	25	25
<b>Isolation, Inter-band, dB</b>	30	30	30	30	30	30	30
<b>VSWR   Return loss, dB</b>	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C,</b>	250	250	250	200	200	200	200

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maximum, watts

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	477.0 N @ 150 km/h (107.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	409.0 N @ 150 km/h (91.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,010.0 N @ 150 km/h (227.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	506.0 N @ 150 km/h (113.8 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	460 mm   18.11 in
<b>Depth, packed</b>	350 mm   13.78 in
<b>Length, packed</b>	2830 mm   111.417 in
<b>Weight, gross</b>	45.7 kg   100.751 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

## 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.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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