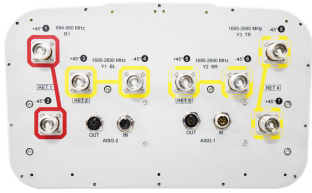


# RV3-65D-R4-V3



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, 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
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

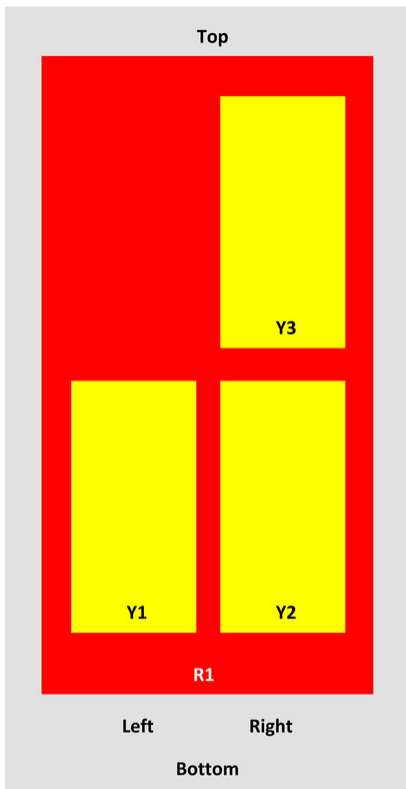
# RV3-65D-R4-V3

## Dimensions

<b>Width</b>	350 mm   13.78 in
<b>Depth</b>	208 mm   8.189 in
<b>Length</b>	2688 mm   105.827 in
<b>Net Weight, without mounting kit</b>	31.7 kg   69.886 lb

## Array Layout

RV3-65D-R4



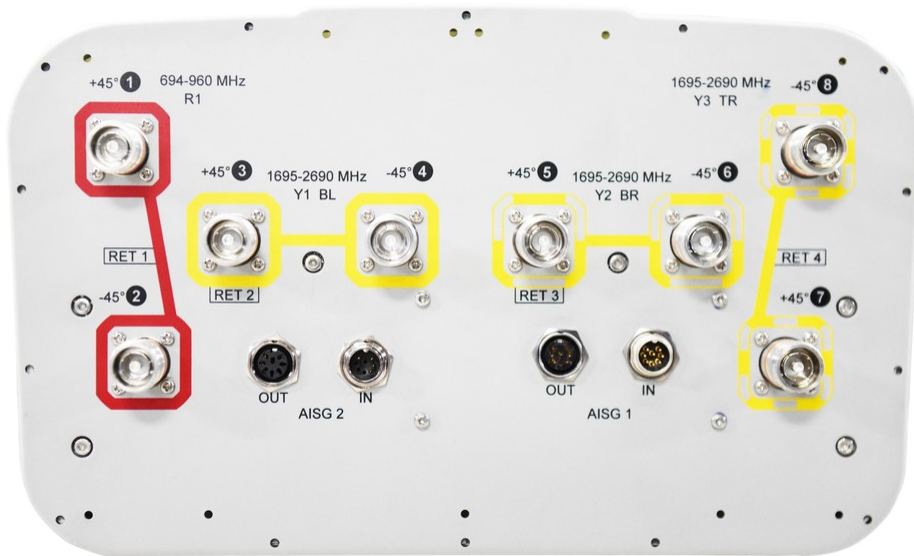
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	ANXXXXXXXXXXXXX1
Y1	1695-2690	3-4	2	ANXXXXXXXXXXXXX2
Y2	1695-2690	5-6	3	ANXXXXXXXXXXXXX3
Y3	1695-2690	7-8	4	ANXXXXXXXXXXXXX4

View from the front of the antenna

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

## Port Configuration

# RV3-65D-R4-V3



## 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

# RV3-65D-R4-V3

maximum, watts

## Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960	1695–1920	1920–2200	2300–2500	2500–2690
Gain by all Beam Tilts, average, dBi	16.3	17	17.3	16.5	17.1	17.8	17.7
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.4	±0.3	±0.8	±0.6	±0.6	±0.6
Gain by Beam Tilt, average, dBi	0° 16.1 5° 16.4 10° 16.3	0° 16.7 5° 17.0 10° 17.0	0° 17.1 5° 17.4 10° 17.3	2° 16.3 6° 16.6 12° 16.4	2° 16.8 6° 17.2 12° 17.1	2° 17.3 6° 17.9 12° 17.7	2° 17.4 6° 17.9 12° 17.4
Beamwidth, Horizontal Tolerance, degrees	±1.1	±1.9	±1.4	±3.9	±2.7	±3.4	±3.5
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.4	±0.3	±0.6	±0.5	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	15	17	18	12	14	13	12
Front-to-Back Total Power at 180° ± 30°, dB	26	25	25	28	28	29	28
CPR at Boresight, dB	17	20	21	18	20	19	17
CPR at Sector, dB	11	10	10	11	11	7	6

## 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)
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	45.7 kg   100.751 lb

## Regulatory Compliance/Certifications

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

# RV3-65D-R4-V3

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## 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

# 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.

## Product Classification

**Product Type** Downtilt mounting kit

## General Specifications

**Application** Outdoor

**Color** Silver

## Dimensions

**Compatible Diameter, maximum** 115 mm | 4.528 in

**Compatible Diameter, minimum** 60 mm | 2.362 in

**Weight, net** 6.5 kg | 14.33 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

## 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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

