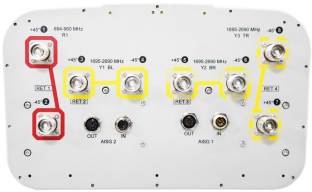
RV3-65D-R4-V3



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

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	Aluminum | Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	6
RF Connector Quantity, low band	2
RF Connector Quantity, total	8

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

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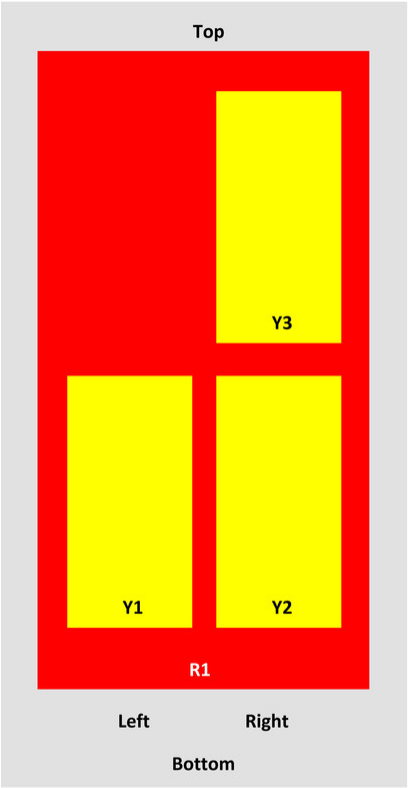
RV3-65D-R4-V3

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	ANxxxxxxxxxxxxxxxx1
Y1	1695-2690	3-4	2	ANxxxxxxxxxxxxxxxx2
Y2	1695-2690	5-6	3	ANxxxxxxxxxxxxxxxx3
Y3	1695-2690	7-8	4	ANxxxxxxxxxxxxxxxx4

View from the front of the antenna

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

Port Configuration

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RV3-65D-R4-V3

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**	**1920–2200**	**2300–2500**	**2500–2690**
Gain, dBi	16.5	17.3	17.4	17	17.5	18.2	18.2
Beamwidth, Horizontal, degrees	67	64	61	63	63	63	62
Beamwidth, Vertical, degrees	8.2	7.4	6.8	7.3	6.4	5.6	5.3
Beam Tilt, degrees	0–10	0–10	0–10	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	24	23	16	17	16	16
Front-to-Back Ratio at 180°, dB	31	33	34	35	37	37	37
Isolation, Cross Polarization, dB	28	28	28	25	28	25	25
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,	250	250	250	200	200	200	200

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maximum, watts

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

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

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