

# RZV4-65D-R6



12-port sector antenna, 2x 694–960, 2x 1427–2690 and 8x 1695–2690 MHz, 65° HPBW, 6x 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
- 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>	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>	10
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	12

## Remote Electrical Tilt (RET) Information

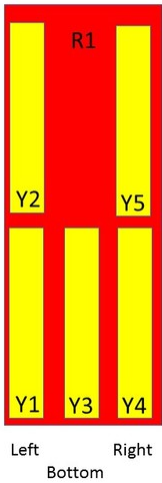
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (5)   Low band (1)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions, maximum</b>	8 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

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## Dimensions

<b>Width</b>	395 mm   15.551 in
<b>Depth</b>	228 mm   8.976 in
<b>Length</b>	2688 mm   105.827 in
<b>Net Weight, without mounting kit</b>	37.4 kg   82.453 lb

## Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxxR1
Y1	1695-2690	3-4	2	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxxY2
Y3	1427-2690	7-8	4	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	9-10	5	CPxxxxxxxxxxxxxxxxY4
Y5	1695-2690	11-12	6	CPxxxxxxxxxxxxxxxxY5

(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>	1427 – 2690 MHz   1695 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,000 W @ 50 °C

## Electrical Specifications

	R1	R1	Y1-Y2/Y4-Y5Y1-Y2/Y4-Y5Y1-Y2/Y4-Y5Y1-Y2/Y4-Y5Y3				Y3	
<b>Frequency Band, MHz</b>	<b>694–862</b>	<b>880–960</b>	<b>1695–1920</b>	<b>1920–2200</b>	<b>2300–2500</b>	<b>2500–2690</b>	<b>1427–1518</b>	<b>1695–2690</b>
<b>Gain, dBi</b>	16.8	17.1	17	17.8	18.3	18	15.5	17.6
<b>Beamwidth, Horizontal, degrees</b>	65	64	68	65	62	63	69	59
<b>Beamwidth, Vertical, degrees</b>	8.6	7.4	7.3	6.5	5.7	5.3	9.2	6.7
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	19	18	18	17	19	22	22	16
<b>Front-to-Back Ratio at 180°, dB</b>	36	34	32	34	32	31	32	34
<b>Isolation, Cross Polarization, dB</b>	27	27	27	27	27	27	25	25
<b>Isolation, Inter-band, dB</b>	28	28	25	25	25	25	25	25

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<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	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	200	200	200	200	250	200

## Electrical Specifications, BASTA

Frequency Band, MHz	694–862	880–960	1695–1920	1920–2200	2300–2500	2500–2690	1427–1518	1695–2690
<b>Gain by all Beam Tilts, average, dBi</b>	16.4	16.8	16.5	17.2	17.7	17.3	15	16.8
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.5	±0.5	±0.7	±0.7	±0.7	±0.6	±1.1
<b>Gain by Beam Tilt, average, dBi</b>	2° 16.1 7° 16.5 12° 16.4	2° 16.4 7° 16.9 12° 16.9	2° 16.4 7° 16.6 12° 16.5	2° 17.0 7° 17.4 12° 17.0	2° 17.6 7° 17.9 12° 17.3	2° 17.2 7° 17.6 12° 17.0	2° 14.9 7° 15.0 12° 15.0	2° 16.6 7° 17.0 12° 16.7
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±3.4	±2.3	±4.7	±6	±5.3	±5.8	±8.6	±9.3
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.8	±0.4	±0.5	±0.5	±0.3	±0.3	±0.3	±1.4
<b>USLS, beampeak to 20° above beampeak, dB</b>	19	18	15	16	15	14	12	14
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	27	24	24	26	26	25	27	28
<b>CPR at Boresight, dB</b>	16	17	19	21	19	20	16	21
<b>CPR at Sector, dB</b>	10	7	8	6	8	9	7	5

## Mechanical Specifications

<b>Mechanical Tilt Range</b>	0°–10°
<b>Wind Loading @ Velocity, frontal</b>	574.0 N @ 150 km/h (129.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	422.0 N @ 150 km/h (94.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	981.0 N @ 150 km/h (220.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	590.0 N @ 150 km/h (132.6 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	505 mm   19.882 in
<b>Depth, packed</b>	386 mm   15.197 in
<b>Length, packed</b>	2821 mm   111.063 in
<b>Weight, gross</b>	54 kg   119.049 lb

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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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.
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## \* Footnotes

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